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Thursday, August 24, 2006

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Location: Biotech-Chem Library

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Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes			
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Scientific and Technical Information Center

SEARCH REQUEST FORM

Lequester's Full Name: BEN JACKEY Examiner #: 73489 Date: 8/21/06
art Unit: 16 % Phone Number: 2- 6704 Serial Number: 10/767, 581
Requester's Full Name: SEN JACKEY Examiner #: 73489 Date: 8/21/06 Art Unit: 1621 Phone Number: 2-6704 Serial Number: 10/767, 581 Cocation (Bldg/Room#) 25531 (Mailbox #): 5119 Results Format Preferred (circle): PAPER DISK ***********************************
o ensure an efficient and quality scarch, please attach a copy of the cover sheet, claims, and abstract or fill out the following:
itle of Invention: Produys & non-steroidal anti-inflammatary of curburylic acid contant enventors (please provide full names): Jamal A. Ji/ani
iventors (please provide full names): Lamal A. Jilani
arliest Priority Date: 17/18/01
arch Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

Noble 10PK 27 and 51F 8124106 STN 1 STD2

^{*}For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

=> b reg
FILE 'REGISTRY' ENTERED AT 13:09:13 ON 24 AUG 2006
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STRUCTURE FILE UPDATES: 23 AUG 2006 HIGHEST RN 904004-64-4 DICTIONARY FILE UPDATES: 23 AUG 2006 HIGHEST RN 904004-64-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

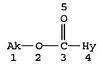
TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d que sta 13 L1 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
GGCAT IS SAT AT 4
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M1-X6 C AT 1
ECOUNT IS E4 C E1 N E1 O AT

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE

L2 (403638)SEA FILE=REGISTRY ABB=ON PLU=ON NC2OC2/ES L3 2805 SEA FILE=REGISTRY SUB=L2 SSS FUL L1

100.0% PROCESSED 49466 ITERATIONS SEARCH TIME: 00.00.01

2805 ANSWERS

=> b hcap FILE 'HCAPLUS' ENTERED AT 13:09:20 ON 24 AUG 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 24 Aug 2006 VOL 145 ISS 9 FILE LAST UPDATED: 23 Aug 2006 (20060823/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d bib abs hitind hitstr 128 tot

- L28 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2003:150529 HCAPLUS
- DN 138:205052
- TI Preparation of 1-(pyrazol-3-yl)-3-(1-naphthyl)ureas as antiinflammatory agents
- IN Cirillo, Pier Francesco; Dinallo, Roger; Regan, John Robinson; Riska, Paul S.; Swinamer, Alan David; Tan, Zhulin; Walter, Brian Andrew
- PA Boehringer Ingelheim Pharmaceuticals, Inc., USA
- SO U.S., 44 pp., Cont.-in-part of U.S. Ser. No. 879,776, abandoned. CODEN: USXXAM
- DT Patent
- LA English
- FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US6525046	B1	20030225	2002US-0165372	20020607 <
	US6319921	B1	20011120	2000US-0484638	20000118 <
	US6333325	B1	20011225	2001US-0871559	20010531 <
	US2002058678	A1	20020516	2001US-0879776	20010612 <
	US6329415	B1	20011211	2001US-0891579	20010626 <
	US2002065285	A1	20020530	2001US-0891820	20010626 <
	US6506748	B2	20030114		
PRAI	2000US-0484638	A3	20000118	<	
	2001US-0879776	B2	20010612		
	1999US-116400P	P	19990119	<	
os	MARPAT 138:205052				
GI					

AB The title compds. Ar1NHC(:X)NHAr2LQ [Ar1 = pyrazolyl, pyrrolyl, imidazolyl, etc.; Ar2 = Ph, naphthyl, quinolyl, etc.; L = alkylene wherein one or more methylene groups are optionally replaced by O, N or S; Q = Ph, naphthyl, pyridyl, etc.; X = O, S], useful for treating diseases involving inflammation such as chronic inflammatory diseases, were prepared E.g., a

Ι

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multi-step synthesis of I, starting from Me 2,2-dimethyl-3-
    hydroxypropionate, was given. Representative title ureas showed IC50 of <
     10 µM against TNF production in THP cells.
IC
     ICM A61K-0031/5377
     ICS A61K-0031/541; A61P-0019/02; C07D-0413/12; C07D-0417/12
INCL 514227800; 514230800; 514236500; 544058200; 544131000; 544140000;
     546275400; 546256000
     28-8 (Heterocyclic Compounds (More Than One Hetero Atom))
CC
     Section cross-reference(s): 1
IT
     Antiarteriosclerotics
        (antiatherosclerotics; preparation of 1-(pyrazol-3-yl)-3-(1-naphthyl)ureas
        as antiinflammatory agents)
IT
    Anti-Alzheimer's agents
    Anti-inflammatory agents
    Antiasthmatics
    Antidiabetic agents
    Antirheumatic agents
    Antiulcer agents
     Bone resorption inhibitors
       Cardiovascular agents
    Human
     Immunosuppressants
        (preparation of 1-(pyrazol-3-yl)-3-(1-naphthyl)ureas as antiinflammatory
        agents)
TT
    285983-41-7P
                    285983-42-8P
                                   285983-43-9P
                                                  285983-44-0P
                                                                 285983-45-1P
     285983-46-2P
                    285983-47-3P
                                   285983-48-4P
                                                  285983-49-5P
                                                                 285983-50-8P
     285983-51-9P
                    285983-52-0P
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                                                                 285983-76-8P
     285983-77-9P
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                                   285983-84-8P
                                                  285983-85-9P
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                    285984-08-9P
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     285984-07-8P
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     285984-20-5P
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                                   476010-09-0P
                                                  477844-70-5P
                                                                  477844-71-6P
                                   489432-49-7P
                                                  499971-96-9P
                                                                  499971-97-0P
     489432-45-3P
                    489432-48-6P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
     THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (preparation of 1-(pyrazol-3-yl)-3-(1-naphthyl) ureas as antiinflammatory
        agents)
TT
     285983-63-3P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
     THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (preparation of 1-(pyrazol-3-yl)-3-(1-naphthyl)ureas as antiinflammatory
        aqents)
RN
     285983-63-3 HCAPLUS
     4-Morpholinecarboxylic acid, 2-[[4-[[[[3-(1,1-dimethylethyl)-1-(4-
CN
     methylphenyl)-1H-pyrazol-5-yl]amino]carbonyl]amino]-1-
     naphthalenyl]oxy]ethyl ester (9CI) (CA INDEX NAME)
```

PAGE 1-A

PAGE 2-A

RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:696457 HCAPLUS

DN 137:237728

TI Peptide conjugates for enhancing drug delivery across and into epithelial

IN Rothbard, Jonathan B.; Wender, Paul A.; McGrane, P. Leo; Sista, Lalitha V. S.; Kirschberg, Thorsten A.

PΑ

Cellgate, Inc., USA
U.S. Pat. Appl. Publ., 80 pp., Cont.-in-part of U.S. Ser. No. 648,400. so CODEN: USXXCO

DT Patent

LΑ English

FAN CNT 4

L MIN	· CNI 4				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US2002127198	A1	20020912	2001US-0792480	20010223 <
	US6669951	B2	20031230		
	US6593292	B1	20030715	2000US-0648400	20000824 <
	CA2438784	AA	20020906	2002CA-2438784	20020225

noble jarrell 24/08/2006

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WO2002067917
                                              2002WO-US05804
                                  20020906
                           A1
                                                                       20020225
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
              CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     CA---2438326
                           AΑ
                                  20020912
                                              2002CA-2438326
                                                                       20020225
     WO2002069930
                           A1
                                  20020912
                                              2002WO-US05829
                                                                       20020225
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              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
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             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US2003022831
                           A1
                                  20030130
                                              2002US-0083960
                                                                       20020225 <--
     EP---1367995
                           A1
                                  20031210
                                              2002EP-0731103
                                                                       20020225
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     EP---1372626
                           A1
                                 20040102
                                              2002EP-0713692
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     JP2004530657
                           T2
                                  20041007
                                              2002JP-0569108
                                                                       20020225
     JP2004533414
                           T2
                                  20041104
                                              2002JP-0567285
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     US2003083256
                                  20030501
                           A1
                                              2002US-0209421
                                                                       20020730 <--
     US---6759387
                           B2
                                  20040706
     US2004186045
                           A1
                                  20040923
                                             2003US-0740365
                                                                       20031217 <--
                                  19990824 <--
PRAI 1999US-150510P
                           P
     2000US-0648400
                           A2
                                  20000824
     2001US-0792480
                           А
                                  20010223
     2002WO-US05804
                           W
                                  20020225
     2002WO-US05829
                           W
                                  20020225
     MARPAT 137:237728
os
     This invention provides compns. and methods for enhancing delivery of
AB
     drugs and other agents across epithelial tissues, including the skin,
     gastrointestinal tract, pulmonary epithelium, ocular tissues and the like.
     The compns. and methods are also useful for delivery across endothelial
     tissues, including the blood brain barrier. The compns. and methods
     employ a delivery enhancing transporter that has sufficient guanidino or
     amidino side-chain moieties to enhance delivery of a compound conjugated to
     the reagent across one or more layers of the tissue, compared to the
     non-conjugated compound The delivery-enhancing polymers include, for
     example, poly-arginine mols. that are preferably between about 6 and 25
     residues in length. E.g., biotinylated polymers of D-arginine were prepared
     and their penetration into the skin of nude mice studied.
IC
     ICM A61K-0038/16
     ICS A61K-0031/765
INCL 424078370
CC
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 1, 34
IT
     50-23-7, Hydrocortisone 60-32-2, 6-Aminohexanoic acid
                                                                  67-43-6
     108-31-6, Maleic anhydride, reactions 541-88-8, Chloroacetic anhydride
     33069-62-4, Taxol 56074-21-6 59277-89-3, Acyclovir
     59865-13-3, Cyclosporin a 84625-61-6, Itraconazole
                                                               104987-11-3, FK 506
     165893-48-1
                    216584-13-3
                                                324077-02-3
                                   324077-01-2
                                                                374568-19-1
     457906-31-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (peptide conjugates for enhancing drug delivery across and into
        epithelial tissues)
IT
     79217-60-0, Cyclosporin
                                104987-12-4, Ascomycin
```

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (peptide conjugates for enhancing drug delivery across and into epithelial tissues)

IT 33069-62-4, Taxol 56074-21-6

RL: RCT (Reactant); RACT (Reactant or reagent) (peptide conjugates for enhancing drug delivery across and into epithelial tissues)

RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, β -(benzoylamino)- α -hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-ylester, (α R, β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 56074-21-6 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2,6-dioxo-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

IT 79217-60-0, Cyclosporin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (peptide conjugates for enhancing drug delivery across and into epithelial tissues)

RN 79217-60-0 HCAPLUS

CN Cyclosporin (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L28 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:610348 HCAPLUS

DN 137:169530

TI Preparation of prodrugs of non-steroidal anti-inflammatory agents and carboxylic acid containing compounds

IN Jilani, Jamal A.

PA Specialized Pharmaceutical Research Ltd. Co., Jordan

SO Eur. Pat. Appl., 47 pp. CODEN: EPXXDW

DT Patent

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LA
     English
FAN.CNT 1
     PATENT NO.
                        KIND DATE
                                            APPLICATION NO.
                                                                     DATE
                      A1 20020814 2001EP-0130083
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     EP---1231209
                                                                     20011218 <--
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     US2003060465 A1 20030327 2001US-0059959
US2005004118 A1 20050106 2004US-0767581
                                                                    20011218 <--
                                                                    20040129 <--
PRAI 2000US-256634P
                         P
                                 20001219 <--
     2001US-0059959
                          B1
                                 20011218
OS
     MARPAT 137:169530
     Claimed are compds. of the formula RC(0)0-spacer-OC(0)R', wherein (i)
AB
     RC(O) - is the acyl residue of an NSAID or other pharmaceutically active
     agent bearing a carboxylic acid function, (ii) spacer is Cn alkyl, (iii) n
     is from 1 to 6, and (iv) R' is substituted or unsubstituted heteroaryl or
     heterocycle. The compds. are prodrugs of NSAIDS and can be used to treat inflammation. For example, \alpha-methyl-4-(2-methylpropyl)benzeneacetic
     acid morpholinocarbonyloxyethyl ester (a prodrug of ibuprofen) was prepared
IC
     ICM C07D-0295/20
     ICS C07D-0209/26; C07D-0487/04; A61K-0031/535; A61P-0029/00
CC
     28-13 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1, 63
IT
     Anti-inflammatory agents
        (nonsteroidal; preparation of prodrugs of non-steroidal
        anti-inflammatory agents and carboxylic acid containing compds.)
TТ
     Antibiotics
       Anticonvulsants
       Cardiovascular agents
       Cytotoxic agents
       Diuretics
     Drug delivery systems
       Muscle relaxants
        (prodrugs; preparation of prodrugs of non-steroidal anti-inflammatory agents
        and carboxylic acid containing compds.)
IT
     446311-17-7P 446311-18-8P 446311-19-9P
     446311-20-2P 446311-21-3P 446311-22-4P
     446311-23-5P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of prodrugs of non-steroidal anti-inflammatory agents and
        carboxylic acid containing compds.)
IT
     446311-24-6P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of prodrugs of non-steroidal anti-inflammatory agents and
        carboxylic acid containing compds.)
IT
     446311-17-7P 446311-18-8P 446311-19-9P
     446311-20-2P 446311-21-3P 446311-22-4P
     446311-23-5P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
        (preparation of prodrugs of non-steroidal anti-inflammatory agents and
        carboxylic acid containing compds.)
RN
     446311-17-7 HCAPLUS
CN
     1H-Indole-3-acetic acid, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl-,
     2-[(4-morpholinylcarbonyl)oxy]ethyl ester (9CI) (CA INDEX NAME)
```

RN 446311-18-8 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[2-(6-methoxy-2-naphthalenyl)-1-oxopropoxy]ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

RN 446311-19-9 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[[2-[(2,6-dichlorophenyl)amino]phenyl]acet yl]oxy]ethyl ester (9CI) (CA INDEX NAME)

RN 446311-20-2 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[2-(3-benzoylphenyl)-1-oxopropoxy]ethyl ester (9CI) (CA INDEX NAME)

RN 446311-21-3 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[[2-[(2,3-dimethylphenyl)amino]phenyl]acet yl]oxy]ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\$$

RN 446311-22-4 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[2-[4-(2-methylpropyl)phenyl]-1oxopropoxy]ethyl ester (9CI) (CA INDEX NAME)

RN 446311-23-5 HCAPLUS

CN 1H-Pyrrolizine-1-carboxylic acid, 5-benzoyl-2,3-dihydro-, 2-[(4-morpholinylcarbonyl)oxy]ethyl ester (9CI) (CA INDEX NAME)

IT 446311-24-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of prodrugs of non-steroidal anti-inflammatory agents and carboxylic acid containing compds.)

RN 446311-24-6 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-bromoethyl ester (9CI) (CA INDEX NAME)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:368496 HCAPLUS

DN 136:374803

TI FAP-activated anti-tumor compounds

IN Peters, Stefan; Leipert, Dietmar; Park, John-Edward; Lenter, Martin; Garin-Chesa, Pilar

PA Boehringer Ingelheim Pharma K.-G., Germany

SO PCT Int. Appl., 48 pp.

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CODEN: PIXXD2
рΤ
     Patent
     English
LΑ
FAN.CNT 1
     PATENT NO.
                         KIND
                                             APPLICATION NO.
                                 DATE
                                                                     DATE
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     a drug by the catalytic action of human fibroblast activation protein
     (\text{FAP-}\alpha), said prodrug having a cleavage site which is recognized by
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Absolute stereochemistry.

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PAGE 1-B

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RL: RCT (Reactant); RACT (Reactant or reagent)
 (human fibroblast activation protein (FAP)-activated antitumor
 prodrugs)

RN 148-82-3 HCAPLUS

CN L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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     Preparation of hydroxamic acids as deacetylase inhibitors
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     Bair, Kenneth Walter; Green, Michael A.; Perez, Lawrence B.; Remiszewski, Stacy W.; Sambucetti, Lidia; Versace, Richard William; Sharma, Sushil
     Novartis AG, Switz.; Novartis-Erfindungen Verwaltungsgesellschaft mbH;
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GΙ
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AB The title compds. [I; R1 = H, halo, alkyl; R2 = H, alkyl, cycloalkyl, etc.; R3, R4 = H, alkyl, acyl, acylamino; or R3 and R4 together with the carbon atom to which they are bound = CO, CS, C:NR8; or R2 together with the N atom to which is bound and R3 together with the C atom to which it is bound form heterocycloalkyl, heteroaryl, etc.; R5 = H, alkyl, aryl, etc.; n1-n3 = 0-6; X, Y = H, halo, alkyl, etc.; R8 = H, alkyl, aryl, etc.] which are deacetylase inhibitors and therefore suitable for pharmaceutical compns. having anti-proliferative properties, were prepared E.g., a 3-step synthesis of II, starting with 4-formylcinnamic acid, was given. The exemplified compds. I showed IC50 of 0.005-0.5 µM against HDA. IC

ΙI

ICM C07D-0209/16

C07C-0259/06; C07D-0417/12; C07D-0403/12; C07D-0471/04; C07D-0519/00; C07D-0295/02; A61K-0031/4045; A61K-0031/16; A61P-0035/00

CC 25-22 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds) Section cross-reference(s): 1

IT Antitumor agents

404950-09-0P

404950-10-3P

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Double bond geometry as shown.

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     Preparation of heterocyclic compounds, e.g., N-alkylpiperidin-3-yl
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Title compds. (4 Markush structures given), e.g., I [X = C(R3)2, O, SO0-2, NR2, NC(0)R7, NC(0)OR2, NS(0)2R7, C=0; Z=C(R3)2, C(0), O, NR, NC(0)OR, SOO-2; m = 1-5; n = 1-2; p = 0-2; q = 0-3; R = H, (cyclo)alkyl,(hetero)aryl, aralkyl, heteroaralkyl; R1 = H, alkyl, (hetero)aryl, aralkyl, heteroaralkyl; R, R1 may be connected through a covalent bond; R2 = H, alkyl, fluoroalkyl, aryl, heteroaryl, cycloalkyl; R3 = H, alkyl, aryl, OR2, OC(O)R2, CH2OR2, CO2R2; wherein any two instances of R3 may be connected by a covalent tether whose backbone consists of 1, 2, 3, or 4-carbon atoms; R4 = H, alkyl, cycloalkyl, aryl, heteroaryl, alkenyl, OR; R5-6 = H, alkyl, (CH2)qY, aryl, heteroaryl, F, OR2, OC(O)R2, or an instance of CR5R6 taken together is C(O); R7 = (cyclo)alkyl, (hetero)aryl, aralkyl, or heteroaralkyl; R8-9 = H, alkyl, (CH2)qY, (hetero)aryl, F, OR2, OC(0)R2, or an instance of CR8R9 taken together is C(0); Y = OR2, N(R2)2, SO0-2R2, P(O) (OR2)2; any two instances of R2 may be connected through a covalent bond; a covalent bond may connect R4 and an instance of R5 or R6; any two instances of R5 and R6 may be connected through a covalent bond; any two geminal or vicinal instances of R8 and R9 may be connected through a covalent bond; and the stereochem. configuration at any stereocenter of I is R, S or a mixture of these configurations.] were prepared Examples include synthesis of several hundred compds. of structure I, functional assays for norepinephrine (NE), dopamine (DA) and serotonin (5-HT) antagonism, determination of NE, DA and 5-HT reuptake inhibition, spontaneous locomotor activity/antidepressant behavioral assay in rats and the synthesis of a 96-member combinatorial library in which the library compds. were screened for monoamine uptake inhibition. For instance, 3-((4-trifluoromethylphenoxy)methyl)piperidine trifluoroacetate was alkylated with 1-[(4-chlorophenyl)cyclobutyl]-2-chloroethanone (preparation given) and the resulting product reduced with NaBH4 to give II. All 4 enantiomers of II were prepared by a stereospecific synthesis, and X-ray crystallog. determination of one enantiomer allowed the absolute stereochem. of III to be assigned. III had EC50 < 10 nM for DA reuptake inhibition compared to nomifensine = 11 nM. I are useful for the treatment of depression, sexual dysfunction, Alzheimer's disease, anxiety, etc.

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    Anti-Alzheimer's agents
    Anti-inflammatory agents
    Antidepressants
       Antihypertensives
    Antimigraine agents
    Antiobesity agents
    Anxiolytics
     Biological transport
     Combinatorial library
     Drug dependence
    Human
     Lesch-Nyhan syndrome
     Menstrual disorder
     Sexual disorders
     Vomiting
     Wilson's disease
        (preparation of heterocyclic compds., e.g., N-alkylpiperidin-3-yl
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     (Synthetic preparation); THU (Therapeutic use); BIOL (Biological
     study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of heterocyclic compds., e.g., N-alkylpiperidin-3-yl
        substituted analogs as ligands for monoamine receptors and
        transporters)
IT
                                   87-51-4, 1H-Indole-3-acetic acid, reactions
     62-53-3, Aniline, reactions
     100-39-0, Benzyl bromide
                               100-52-7, Benzaldehyde, reactions
                                                                     104-47-2.
     (4-Methoxyphenyl)acetonitrile 105-60-2, Azepan-2-one, reactions
     106-39-8, 1-Bromo-4-chlorobenzene
                                        106-89-8, Epichlorohydrin, reactions
     108-95-2, Phenol, reactions
                                  109-64-8, 1,3-Dibromopropane
                                                                 140-53-4.
     (4-Chlorophenyl) acetonitrile
                                   141-43-5, 2-Aminoethanol, reactions
     150-76-5, 4-Methoxyphenol
                                 156-87-6, 3-Amino-1-propanol
                                                                 371-41-5
                     402-44-8, 4-Trifluoromethylfluorobenzene
     4-Fluorophenol
                                                                  402-45-9.
     4-Trifluoromethylphenol
                               402-49-3, 4-Trifluoromethylbenzylbromide
     459-22-3, (4-Fluorophenyl)acetonitrile 533-31-3, Sesamol
                                                                 536-38-9,
     2-Bromo-4'-chloroacetophenone 825-83-2 828-27-3, 4-
     Trifluoromethoxyphenol
                              874-61-3, 4-Oxocyclohexanecarboxylic acid
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1529-41-5, (3-Chlorophenyl) acetonitrile 1878-66-6, 4-Chlorophenylacetic acid 2212-05-7 3471-31-6, (5-Methoxy-1H-indol-3-yl)acetic acid 4439-02-5, (Benzo[1,3]dioxol-5-yl)acetonitrile 4335-77-7 32247-96-4, [1,1'-Biphenyl]-4-acetic acid 6258-30-6 29786-44-5 1-Bromomethyl-3,5-bis(trifluoromethyl)benzene 33000-64-5, 2-Bromo-1-(4-chlorophenyl)-2-methylpropanone 38693-11-7, 2-Chloro-1-(5-chloro-1H-indol-3-yl)ethanone 39945-51-2, 3-Hydroxymethylpiperidine-1-carboxylic acid benzyl ester 40114-49-6, 1-Benzylpiperidin-3-one 49561-96-8, 4-(Trifluoromethoxy)phenylacetonitri 50921-39-6 64051-79-2, 3-Hydroxypiperidine hydrochloride 70918-53-5, (R)-2,3-Dihydrobenzo[1,4]dioxine-2-carboxylic acid 70918-54-6, (S)-2,3-Dihydrobenzo[1,4]dioxine-2-carboxylic acid 83602-37-3 84485-51-8, 1-(4-Chlorophenyl)-1-74205-38-2 (carboxymethyl) cyclobutane 110013-18-8 110013-19-9 116574-71-1, 1-Boc-3-hydroxymethylpiperidine 118892-74-3 129383-92-2, 4-(Trifluoromethoxy)benzyltriphenylphosphonium bromide 142253-55-2 151157-53-8, 1-(4-(Trifluoromethoxy)phenyl)-1-(carboxy)cyclobutane 160706-62-7, (R)-1-Benzyloxycarbonylnipecotic acid 183483-09-2 189321-66-2 201478-72-0 245057-78-7 404886-96-0 405059-86-1, 3-(Phenoxymethyl)piperidine 404886-68-6 trifluoroacetate 405060-21-1, 3-(4-Methoxyphenoxymethyl)piperidine trifluoroacetate 405061-52-1 405063-39-0 405066-01-5, 1-(2-(Trifluoromethoxy)phenyl)-1-(bromoacetyl)cyclobutane 405090-67-7. 1-(4-Chlorophenyl)-1-(bromomethyl)cyclobutane 405090-72-4 405090-73-5 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of heterocyclic compds., e.g., N-alkylpiperidin-3-yl substituted analogs as ligands for monoamine receptors and transporters) ΙT 405090-20-2P 405090-22-4P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of heterocyclic compds., e.g., N-alkylpiperidin-3-yl substituted analogs as ligands for monoamine receptors and transporters) RN 405090-20-2 HCAPLUS CN 4-Morpholinecarboxylic acid, 2-[[3-[[4-(trifluoromethyl)phenoxy]methyl]-1piperidinyl]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

$$O-CH_2$$
 $O-CH_2$
 O

RN 405090-22-4 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[3-[[4-(trifluoromethyl)phenoxy]methyl]-1piperidinyl]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

IT 189321-66-2

RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of heterocyclic compds., e.g., N-alkylpiperidin-3-yl

substituted analogs as ligands for monoamine receptors and transporters)

RN 189321-66-2 HCAPLUS

2,4-Morpholinedicarboxylic acid, 4-(1,1-dimethylethyl) ester (9CI) (CA CN INDEX NAME)

ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN L28

AN 2002:83983 HCAPLUS

DN 136:151156

TI Preparation of 3-(5-phenylthien-2-yl)oxazolidin-2-ones as TNF inhibitors

IN Mueller, Ulrich; Handke, Gabriele; Fischer, Ruediger; Petesch, Nicole; Schmeck, Carsten; Kretschmer, Axel; Nielsch, Ulrich; Bremm, Klaus-Dieter; Zaiss, Siegfried

PA

Bayer A.-G., Germany Ger. Offen., 54 pp. SO

CODEN: GWXXBX

Patent LΑ German

FAN CNT 1

T. LITA	CIVI				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE10034625	A1	20020131	2000DE-1034625	20000717 <
PRAI	2000DE-1034625		20000717	<	
os	MARPAT 136:151156				

GI

DT

$$\mathbb{R}^1$$
 \mathbb{R}^2

- Title compds. [I; R1 = (substituted) (annelated) alkylheterocyclyl; R2 = ΔR amino (fused) OH], were prepared Thus, 1-(4-[5-(1-hydroxymethyl-2oxooxazolidin-3-yl)thien-2-yl]benzyl)-1H-imidazole-4,5-dicarboxylic acid di-Me ester was obtained in an yield of 97% by Mitsunobu reaction of 3-[5-(4-formylphenyl)thien-2-yl]-5-[dimethyl-(1,1dimethylethyl)silyloxymethyl]oxazolidin-2-one (preparation given) with 1H-imidazole-4,5-dicarboxylic acid di-Me ester. Several I tested by an enzyme-linked immuno sorbent assay (ELISA) gave 50% TNF- α biosynthesis inhibition with EC50 = 500-8,000 nM in human blood monocytes.
- ICM C07D-0413/14 IC ICS A61K-0031/422

28-6 (Heterocyclic Compounds (More Than One Hetero Atom)) CC Section cross-reference(s): 1

IT Antiarteriosclerotics

Antiarthritics

(preparation of (phenylthienyl)oxazolidinones as TNF inhibitors)

IT 392681-85-5P 392681-87-7P 392681-89-9P 392681-83-3P 392681-91-3P 392681-93-5P 392681-99-1P 392682-01-8P

392682-05-2P 392682-11-0P 392682-03-0P 392682-07-4P 392682-09-6P

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392682-15-4P 392682-17-6P
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     RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
     THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (preparation of (phenylthienyl)oxazolidinones as TNF inhibitors)
IT
     392681-87-7P 392681-91-3P 392682-17-6P
     392682-23-4P 392682-43-8P 392682-48-3P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation);
     THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (preparation of (phenylthienyl)oxazolidinones as TNF inhibitors)
     392681-87-7 HCAPLUS
RN
CN
     4-Morpholinecarboxylic acid, [3-[5-[4-[(4,5-dicyano-1H-imidazol-1-
     y1)methyl]phenyl]-2-thienyl]-2-oxo-5-oxazolidinyl]methyl ester (9CI)
                                                                             (CA
     INDEX NAME)
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$$NC$$
 N
 CH_2
 CH_2
 CH_2
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 CH_2

RN 392681-91-3 HCAPLUS
CN 4-Morpholinecarboxylic acid, [2-oxo-3-[5-[4-[(4,5,6,7-tetrahydro-5,6-dimethyl-4,7-dioxo-1H-imidazo[4,5-d]pyridazin-1-yl)methyl]phenyl]-2-thienyl]-5-oxazolidinyl]methyl ester (9CI) (CA INDEX NAME)

RN 392682-17-6 HCAPLUS
CN 4-Morpholinecarboxylic acid, [3-[5-[4-[[5-(ethoxycarbonyl)-4-methyl-1H-imidazol-1-yl]methyl]phenyl]-2-thienyl]-2-oxo-5-oxazolidinyl]methyl ester

(9CI) (CA INDEX NAME)

RN 392682-23-4 HCAPLUS
CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[[4-[5-[5-[[(4-morpholinylcarbonyl)oxy]methyl]-2-oxo-3-oxazolidinyl]-2-thienyl]phenyl]methyl]-, dimethyl ester (9CI) (CA INDEX NAME)

RN 392682-43-8 HCAPLUS
CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[[3-[5-[5-[[(4-morpholinylcarbonyl)oxy]methyl]-2-oxo-3-oxazolidinyl]-2-thienyl]phenyl]methyl]-, dimethyl ester (9CI) (CA INDEX NAME)

RN 392682-48-3 HCAPLUS
CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[[4-[5-[(5S)-5-[[(4-morpholinylcarbonyl)oxy]methyl]-2-oxo-3-oxazolidinyl]-2-thienyl]phenyl]methyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L28 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
    2002:83980 HCAPLUS
AN
DN
     136:134763
ΤI
    Preparation of 1-benzyl-1H-imidazoles as TNF inhibitors
    Mueller, Ulrich; Handke, Gabriele; Fischer, Ruediger; Petesch, Nicole;
TN
    Schmeck, Carsten; Kretschmer, Axel; Nielsch, Ulrich; Bremm, Klaus-Dieter
PA
    Bayer A.-G., Germany
so
    Ger. Offen., 40 pp.
     CODEN: GWXXBX
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    Patent
LA
    German
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    PATENT NO.
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                               DATE
                                          APPLICATION NO.
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                                                                20000717 <--
PΙ
    DE--10034622
                         A1
                               20020131
                                          2000DE-1034622
                               20000717 <--
PRAI 2000DE-1034622
    MARPAT 136:134763
OS
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Title compds. [I; R2, R3 = (alkoxycarbonyl-substituted) hydrocarbon group; AB m = 1-6; R1 = (substituted) 5-6 membered heterocyclyl], were prepared Thus, a mixture of 2-thienylboronic acid, 1-[(4-phenyl)methyl]-1H-imidazole-4,5dicarboxylic acid di-Me ester, and tetrakis(triphenylphosphine)palladium(0) in THF was refluxed for 1 h followed by addition of Na2CO3 and reflux for 20 h to give 27% 1-[4-(2-thienyl)benzyl]-1H-imidazole-4,5dicarboxylic acid di-Me ester. Several I tested by an enzyme-linked immuno sorbent assay (ELISA) gave 50% TNF- α biosynthesis inhibition with EC50 = $2.7-5.5 \mu M$ in human blood monocytes. ICM C07D-0409/10 IC ICS C07D-0409/14; C07D-0413/12; A61K-0031/422; A61K-0031/4178 CC 28-9 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1 IT Antiarteriosclerotics Antiarthritics Human (preparation of (benzyl)imidazoles as TNF inhibitors) 392250-08-7P 392249-98-8P 392249-99-9P 392250-00-9P 392250-06-5P IT 392250-13-4P 392250-14-5P 392250-15-6P 392250-16-7P 392250-17-8P 392250-18-9P 392250-19-0P 392250-20-3P 392250-25-8P 392250-23-6P 392250-24-7P 392250-21-4P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

RN 392250-14-5 HCAPLUS
CN Pentonic acid, 2,3-dideoxy-2-[5-[4-[[4,5-bis(methoxycarbonyl)-1H-imidazol1-yl]methyl]phenyl]-2-thienyl]-, γ-lactone, 5-(4morpholinecarboxylate) (9CI) (CA INDEX NAME)

RN 392250-19-0 HCAPLUS
CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[[4-[5-[[[3-[(4morpholinylcarbonyl)oxy]propoxy]carbonyl]amino]-2-thienyl]phenyl]methyl]-,
dimethyl ester (9CI) (CA INDEX NAME)

RN 392250-20-3 HCAPLUS
CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[[4-[5-[dihydro-5-[[(4-morpholinylcarbonyl)oxy]methyl]-2-oxo-2H-1,3-oxazin-3(4H)-yl]-2-thienyl]phenyl]methyl]-, dimethyl ester (9CI) (CA INDEX NAME)

RN 392250-24-7 HCAPLUS

CN 1H-Imidazole-4,5-dicarboxylic acid, 1-[[4-[5-[[[2-(hydroxymethyl)-3-[(4-morpholinylcarbonyl)oxy]propoxy]carbonyl]amino]-2-thienyl]phenyl]methyl]-, dimethyl ester (9CI) (CA INDEX NAME)

PAGE 1-B

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L28
     ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
     2001:713348 HCAPLUS
AN
DN
      135:273108
      Preparation of 8-oxo-5,8-dihydro-6<i>h</i>-dibenzo[<i>a,g</i>]quinolizine-
ΤI
      13-propanoic acid derivatives and the therapeutic use thereof
     Dachary, Emmanuelle; Estenne-Bouhtou, Genevieve; George, Pascal; Gillet,
IN
     Gerard; Granger, Patrick; Marabout, Benoit; Sevrin, Mireille
PΑ
      Sanofi-Synthelabo, Fr.
      PCT Int. Appl., 25 pp.
SO
     CODEN: PIXXD2
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     Patent
      French
LΑ
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                                                                              DATE
      PATENT NO.
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                                     20010927
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PRAI 2000FR-0003723
                                     20000323
                              Α
      CASREACT 135:273108; MARPAT 135:273108
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AB The invention concerns compds. I [X = H, halogen, C1-3-alkyl, C1-3-alkoxy, CF3; R = H, C1-4-alkyl, C3-5-cycloalkylmethyl, CH2Ph, CONR1R2; R1, R2 = H, C1-4-alkyl, or together, with the nitrogen atom bearing them, a morpholinyl or piperidinyl cycle, or still a group of general formula COR3; R3 = C1-4-alky] which have therapeutic application for disorders related to the transmission of GABA-ergics of GABAA receptors. Thus, I (X = CF3-10, R = CO-morpholino) was prepared from ester II via alc. I (X = X = CF3-10, R = H). GABAA receptor binding and the electrophysiol. of I were investigated (no data). IC ICM C07D-0455/03 ICS A61K-0031/4375; A61P-0025/00 31-4 (Alkaloids) Section cross-reference(s): 1, 63 IT Acylation Amidation Anticonvulsants Anxiolytics Etherification Reduction (preparation and therapeutic use of 8-oxo-5,8-dihydro-6<i>h</i> dibenzo[<i>a,g</i>]quinolizine-13-propanoic acid derivs.) TT Muscle relaxants (spasmolytics; preparation and therapeutic use of 8-oxo-5,8-dihydro-6<i>h</i>-dibenzo[<i>a,g</i>]quinolizine-13-propanoic acid derivs.) IT 362509-59-9P 362509-47-5P 362509-51-1P 362509-55-5P 362509-63-5P 362509-67-9P 362509-71-5P 362509-75-9P 362509-79-3P 362509-83-9P 362509-95-3P 362509-99-7P 362509-87-3P 362509-91-9P 362510-03-0P 362510-09-6P 362510-06-3P 362510-11-0P 362510-14-3P 362510-17-6P 362510-19-8P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and therapeutic use of 8-oxo-5,8-dihydro-6<i>h</i>dibenzo[<i>a,g</i>]quinolizine-13-propanoic acid derivs.) IT 362510-17-6P 362510-19-8P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and therapeutic use of 8-oxo-5,8-dihydro-6<i>h</i>dibenzo[<i>a,g</i>]quinolizine-13-propanoic acid derivs.) RN 362510-17-6 HCAPLUS CN 4-Morpholinecarboxylic acid, [5,8-dihydro-13-[3-(methylamino)-3-oxopropyl]-8-oxo-10-(trifluoromethyl)-6H-dibenzo[a,g]quinolizin-2-yl]methyl ester (9CI) (CA INDEX NAME)

RN 362510-19-8 HCAPLUS

CN 4-Morpholinecarboxylic acid, [5,8-dihydro-10-methyl-13-[3-(methylamino)-3-oxopropyl]-8-oxo-6H-dibenzo[a,g]quinolizin-2-yl]methyl ester (9CI) (CA INDEX NAME)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 10 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:472681 HCAPLUS

DN 135:76885

TI Preparation of 4-(4-pyrimidinyloxy)-2-butyn-1-ol derivatives as endothelin receptor antagonists

IN Bolli, Martin; Boss, Christoph; Clozel, Martine; Fischli, Walter

PA Actelion Pharmaceuticals Ltd., Switz.

SO PCT Int. Appl., 89 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

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ΡI
                                 20010628
                                             2000WO-EP12743
     WO2001046156
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     2000WO-EP12743
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os
     MARPAT 135:76885
GΙ
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The title butynediol derivs. (I) [wherein R1 = (un)substituted Ph, heterocyclyl, 2-pyridyl, benzyl, or (hetero)aryl; R2 = H, alkyl, CF3 or (un)substituted Ph, heterocyclyl, heteroaryl, benzyl, 2-pyrimidyl, (hetero)aryl, (thio)carbamoyl, (thio)acyl, etc.; R3 = H, alkyl, or (un)substituted Ph, benzofuranyl, or heteroaryl; R4 = H, halo, CF3, alkyl, alkoxy(alkyl), alkylthio(alkyl), hydroxyalkyl, aminoalkyl(alkyl), aryl(alkyl), arylamino, arylthio, aryloxy, heteroaryl, heterocyclyl, or (un)substituted amino or Ph, etc.; X = O, S, NH, or a bond; or the enantiomers, diastereomers, and diastereomeric racemates thereof] were prepared as endothelin (ET) receptor antagonists. For example, cycloaddn. of 4-amidinopyridine+HCl to di-Me (o-methoxyphenoxy)malonate (preparation of starting materials given) to give the dihydroxypyrimidine, chlorination using PCl5, addition of 5-isopropylpyridine-2-sulfonamide+K, and reaction

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with 2-butyne-1,4-diol afforded II. The latter inhibited the binding of
     [1251] endothelin-1 to microsomal membranes from recombinant CHO cells
     expressing recombinant ETA or ETB receptors with IC50 values of 26 nM and
     77 nM, resp. I are useful for the treatment of endothelin-related
     disorders, such as circulatory disorders, proliferative disorders,
    migraine, asthma, and inflammatory disorders (no data).
IC
     ICM C07D-0239/52
         CO7D-0239/34; C07D-0401/14; C07D-0401/04; C07D-0403/04; C07D-0413/14:
          C07D-0401/12; A61K-0031/505; C07D-0401/14; C07D-0239/00;
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    Anti-inflammatory agents
       Anti-ischemic agents
       Antianginal agents
    Antiasthmatics
       Antihypertensives
     Antimigraine agents
       Antitumor agents
       Cytotoxic agents
        (preparation of 4-(4-pyrimidinyloxy)-2-butyn-1-ol endothelin receptor
        antagonists for treatment of circulatory disorders, proliferative
        disorders, migraine, asthma, and inflammatory disorders)
IT
     Proliferation inhibition
        (proliferation inhibitors; preparation of
        4-(4-pyrimidinyloxy)-2-butyn-1-ol endothelin receptor antagonists for
        treatment of circulatory disorders, proliferative disorders, migraine,
        asthma, and inflammatory disorders)
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     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of 4-(4-pyrimidinyloxy)-2-butyn-1-ol endothelin receptor
        antagonists by reaction of chloropyrimidines with 2-butyne-1,4-diols or
        hydroxy-protected 2-butyne-1,4-diols)
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     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
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        (preparation of 4-(4-pyrimidinyloxy)-2-butyn-1-ol endothelin receptor
        antagonists by reaction of chloropyrimidines with 2-butyne-1,4-diols or
        hydroxy-protected 2-butyne-1,4-diols)
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     346672-20-6 HCAPLUS
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     4-Morpholinecarboxylic acid, 4-[[5-(2-methoxyphenoxy)-6-[[[5-(1-
     methylethyl) -2-pyridinyl] sulfonyl] amino] -2-(4-morpholinyl) -4-
     pyrimidinyl]oxy]-2-butynyl ester (9CI) (CA INDEX NAME)
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RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L28 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     2001:380438 HCAPLUS
DN
     135:24657
ΤI
     Selective cellular targeting: multifunctional delivery vehicles
IN
     Glazier, Arnold
     Drug Innovation & Design, Inc., USA
PA
     PCT Int. Appl., 981 pp.
     CODEN: PIXXD2
DT
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LА
     English
FAN.CNT 1
     PATENT NO.
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     The present invention relates to the compns., methods, and applications of
     a novel approach to selective cellular targeting. The purpose of this
     invention is to enable the selective delivery and/or selective activation
     of effector mols. to target cells for diagnostic or therapeutic purposes.
     The present invention relates to multi-functional prodrugs or targeting
     vehicles wherein each functionality is capable of enhancing targeting
     selectivity, affinity, intracellular transport, activation or
     detoxification. The present invention also relates to ultralow dose, multiple target, multiple drug chemotherapy and targeted immunotherapy for
     cancer treatment.
IC
     ICM A61K-0047/48
     63-5 (Pharmaceuticals)
CC
     Section cross-reference(s): 1, 2, 8, 15, 25, 28
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TT
     Antitumor agents
     Cell division
     Chelating agents
       Cytotoxic agents
     Drug targeting
     Imaging agents
     Immunization
     Immunostimulants
        (multifunctional delivery vehicles for selective cellular targeting of
IT
     Proliferation inhibition
        (proliferation inhibitors; multifunctional delivery
        vehicles for selective cellular targeting of drugs)
IT
     Antitumor agents
        (vaccines; multifunctional delivery vehicles for selective cellular
        targeting of drugs)
IT
     23214-92-8DP, immucillin G derivs.
                                          209799-75-7DP, doxorubicin
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        (multifunctional delivery vehicles for selective cellular targeting of
        drugs)
IT
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               59-30-3D, Folic acid, masked derivs.
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     Podophyllotoxin, derivs. 519-23-3D, Ellipticine, derivs.
     865-21-4, Vinblastine 7689-03-4, Camptothecin 10159-53-2D, Phosphoramide mustard, analogs 11116-31-7D, Bleomycin A2, derivs.
     24280-93-1, Mycophenolic acid 33069-62-4D, Taxol, derivs.
     52128-35-5, Trimetrexate 65271-80-9D, Mitoxantrone, derivs.
     77327-05-0, Didemnin B 112953-11-4
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     derivs.
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     236743-94-5, Phthalascidin 265646-19-3, Indanocine
     RL: PEP (Physical, engineering or chemical process); THU (Therapeutic
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use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or
reagent); USES (Uses)
   (multifunctional delivery vehicles for selective cellular targeting of
   drugs)
23214-92-8DP, immucillin G derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); PNU (Preparation, unclassified); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (multifunctional delivery vehicles for selective cellular targeting of
   drugs)
23214-92-8 HCAPLUS
5,12-Naphthacenedione, 10-[(3-amino-2,3,6-trideoxy-\alpha-L-lyxo-
hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-
1-methoxy-, (8S,10S)- (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

IT

RN

CN

Absolute stereochemistry. Rotation (+).

RN 33069-62-4 HCAPLUS

CN Benzenepropanoic acid, β -(benzoylamino)- α -hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-ylester, (α R, β S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

IT 341552-46-3P

RL: PNU (Preparation, unclassified); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(multifunctional delivery vehicles for selective cellular targeting of drugs)

RN 341552-46-3 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[4-[[[(1-[1,1'-biphenyl]-4-yl-1-methylethoxy)carbonyl]amino][[(1-[1,1'-biphenyl]-4-yl-1-methylethoxy)carbonyl]imino]methyl]amino]phenyl]-6-(iodomethylene)-2-oxo-, 9H-fluoren-9-ylmethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

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L28 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
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AN2001:359799 HCAPLUS

DN 134:366803

Synthesis and use of aliphatic amine substituted piperidyl diaryl pyrrole TI derivatives as antiprotozoal agents

Biftu, Tesfaye; Feng, Danqing D.; Liang, Gui-Bai; Ponpipom, Mitree M.; IN Qian, Xiaoxia; Girotra, Narindar; Fisher, Michael H.; Wyvratt, Matthew J.

PA Merck & Co., Inc., USA

PCT Int. Appl., 64 pp. so

CODEN: PIXXD2

DTPatent

English LА

	OM 1																
PAIN.	CNT 1																
	PATENT 1	NO.			KIN) :	DATE		7	APPL:	ICAT:	ION I	NO.		D	ATE	
ΡI	WO200103	3415	0		A1		2001	0517	:	20001	WO-U	5309	48		20	0001	110 <
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					DE,												
					IN,												
		LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,
		SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UΑ,	ŬĠ,	υs,	UΖ,	VN,	YU,
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	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZW,	AT,	BE,	CH,	CY,
		DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,

Ι

$$(R)_{p} \xrightarrow{|R|} R^{2} \xrightarrow{R^{4}} R^{5}$$

$$(R^{7})_{n}$$

Trisubstituted pyrroles I are antiprotozoal agents (no data), useful in AB the treatment and prevention of protozoal diseases in human and animals, including the control of coccidiosis in poultry [wherein: n = 0-1; p = 1-3; X = bond, (CRaRa)p, cycloalkylene or cycloalkylidene; R = halo; R1 = H or alkyl; R2, R3 = H, (un)substituted alk(en/yn)yl, (un)substituted phenyl/benzyl, ester, or taken together are oxo; R4 = NH2 or CONH2 or their derivs.; R5, R6 = H, alk(en/yn)yl, cycloalkyl(alkyl), heterocyclyl(alkyl), (hetero)aryl(alkyl), or together represent oxo; or R4, R5 and the carbon to which they are attached form a 3-7 membered non-aromatic (substituted) ring containing a substituted nitrogen and (substituted) with an addnl. heteroatom chosen from O, S(O)0-2 and N; R7 = O or Me; Ra = H, alkyl or ether]. Approx. 170 compds. were prepared For instance, 4-picoline was lithiated and condensed with 4-FC6H4CONMeOMe, and the resulting ketone was deprotonated and coupled with 4-(2-iodoacetyl)-1-(benzyloxycarbonyl)piperidine to give a 1,4-diketone. Cyclization of this with ammonium acetate and deprotection gave pyrrole intermediate II [R' = H], which was reductively N-alkylated by N-methyl-4-piperidone and NaBH(OAc)3 to give title compound II [R' = 1-methylpiperidin-4-yl].

IC ICM A61K-0031/4545

ICS C07D-0401/14

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))

Section cross-reference(s): 1, 5, 18

TT 57-62-5, Chlortetracycline 59-06-3, Ethopabate 79-57-2,
Oxytetracycline 121-25-5, Amprolium 148-01-6, Dinitolmide 330-95-0,
Nicarbazin 2971-90-6, Clopidol 11054-70-9, Lasalocid
17090-79-8, Monensin 18507-89-6, Decoquinate 25875-51-8, Robenidine
53003-10-4, Salinomycin 55134-13-9, Narasin 55837-20-2,
Halofuginone 101831-37-2, Diclazuril 113378-31-7, Semduramicin
119758-39-3, Maduramicin
RL: AGR (Agricultural use); BAC (Biological activity or effector, except

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adverse); BSU (Biological study, unclassified); FFD (Food or feed use);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (combination anticoccidial agent containing; synthesis and use of aliphatic
        amine substituted piperidyl diaryl pyrrole derivs. as antiprotozoal
        agents)
IT
     340185-28-6P
                    340185-34-4P
                                   340185-35-5P
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     340185-43-5P
                    340185-48-0P
                                   340185-49-1P
                                                  340185-50-4P
                                                                  340185-51-5P
                    340185-53-7P
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                                                  340185-66-2P
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     RL: AGR (Agricultural use); BAC (Biological activity or effector, except
     adverse); BSU (Biological study, unclassified); FFD (Food or feed use);
     RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use)
     ; BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent);
    USES (Uses)
        (drug candidate; synthesis and use of aliphatic amine substituted
        piperidyl diaryl pyrrole derivs. as antiprotozoal agents)
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    RL: AGR (Agricultural use); BAC (Biological activity or effector, except
     adverse); BSU (Biological study, unclassified); FFD (Food or feed use);
     SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (drug candidate; synthesis and use of aliphatic amine substituted
        piperidyl diaryl pyrrole derivs. as antiprotozoal agents)
IT
     79-10-7, Acrylic acid, reactions 96-34-4, Methyl chloroacetate
     108-89-4, 4-Picoline
                            503-29-7, Azetidine
                                                 693-11-8
                                                             775-16-6,
    N-Benzyl-3-pyrrolidinone
                               867-44-7
                                           1069-72-3
                                                       1445-73-4,
                               1956-21-4
                                          2044-64-6
                                                       2235-46-3
                                                                    2488-15-5
    N-Methyl-4-piperidinone
    2592-18-9
                 2680-03-7, N, N-Dimethylacrylamide 2917-91-1
                                                                 3033-77-0
                 3601-66-9 3647-69-6, 4-(2-Chloroethyl)morpholine
    3303-84-2
    hydrochloride
                   3978-80-1
                                5241-64-5 5241-66-7
                                                        5455-98-1
                                                                     5734-12-3.
     2-Methylthio-2-imidazoline hydrochloride
                                                5875-25-2, 2-Bromopropionamide
     6972-41-4
                7250-67-1, 1-(2-Chloroethyl)pyrrolidine hydrochloride
     7764-95-6
                 13139-14-5
                              13726-69-7
                                           14676-01-8
                                                        15030-72-5
                                                                      15761-38-3
     16948-16-6
                 17201-66-0
                               18942-49-9
                                            19146-51-1
                                                         22818-40-2
    26371-07-3, 1-Piperidinepropanoic acid
                                              33996-33-7
                                                           34306-42-8
    37784-17-1
                 40371-51-5 51077-14-6
                                            55533-24-9
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70642-86-3
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     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reactant; synthesis and use of aliphatic amine substituted piperidyl
        diaryl pyrrole derivs. as antiprotozoal agents)
     79-57-2, Oxytetracycline 11054-70-9, Lasalocid
IT
     53003-10-4, Salinomycin
    RL: AGR (Agricultural use); BAC (Biological activity or effector, except
    adverse); BSU (Biological study, unclassified); FFD (Food or feed use);
     THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (combination anticoccidial agent containing; synthesis and use of aliphatic
        amine substituted piperidyl diaryl pyrrole derivs. as antiprotozoal
        agents)
RN
     79-57-2 HCAPLUS
    2-Naphthacenecarboxamide, 4-(dimethylamino)-1,4,4a,5,5a,6,11,12a-octahydro-
    3,5,6,10,12,12a-hexahydroxy-6-methyl-1,11-dioxo-, (4S,4aR,5S,5aR,6S,12aS)-
     (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 11054-70-9 HCAPLUS

CN Benzoic acid, 6-[7-[5-ethyl-5-(5-ethyltetrahydro-5-hydroxy-6-methyl-2H-pyran-2-yl)tetrahydro-3-methyl-2-furanyl]-4-hydroxy-3,5-dimethyl-6-oxononyl]-2-hydroxy-3-methyl- (9CI) (CA INDEX NAME)

Currently available stereo shown.

RN 53003-10-4 HCAPLUS

CN Salinomycin (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 340186-64-3P

CN

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(drug candidate; synthesis and use of aliphatic amine substituted piperidyl diaryl pyrrole derivs. as antiprotozoal agents)

RN 340186-64-3 HCAPLUS

4-Morpholinecarboxylic acid, 2-[[4-[5-(4-fluorophenyl)-4-(4-pyridinyl)-1H-pyrrol-2-yl]-1-piperidinyl]carbonyl]-, methyl ester (9CI) (CA INDEX NAME)

IT 340186-65-4P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); FFD (Food or feed use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; synthesis and use of aliphatic amine substituted piperidyl diaryl pyrrole derivs. as antiprotozoal agents)

RN 340186-65-4 HCAPLUS
CN 4-Morpholinecarboxyl

4-Morpholinecarboxylic acid, 2-[[4-[5-(4-fluorophenyl)-4-(4-pyridinyl)-1H-pyrrol-2-yl]-1-piperidinyl]methyl]-, methyl ester (9CI) (CA INDEX NAME)

```
sackey 10 / 767581
TΤ
     312965-04-1
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (reactant; synthesis and use of aliphatic amine substituted piperidyl
        diaryl pyrrole derivs. as antiprotozoal agents)
RN
     312965-04-1 HCAPLUS
CN
     2,4-Morpholinedicarboxylic acid, 4-(9H-fluoren-9-ylmethyl) ester (9CI)
     (CA INDEX NAME)
HO2C
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RECOT 1
              THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
   ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
1.28
AN
     2001:12274 HCAPLUS
DN
     134:86272
TI
     Preparation of pyrimidine derivatives as Src-family protein tyrosine
     kinase inhibitor compounds
IN
     Hunt, Julianne A.; Mills, Sander G.; Sinclair, Peter J.; Zaller, Dennis M.
PA
    Merck & Co., Inc., USA
SO
     PCT Int. Appl., 181 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
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                                 DATE
                                              APPLICATION NO.
                                                                      DATE
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05
     MARPAT 134:86272
GI
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$$X^{1}$$
 X^{2}
 X^{3}
 X^{4}
 X^{4}
 X^{1}
 X^{2}
 X^{3}
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 X^{4}
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 X^{4}
 X^{4}
 X^{1}
 X^{2}
 X^{3}
 X^{4}
 X^{4

AB What are claimed are pyrimidine compds. (shown as I), or their pharmaceutically acceptable salts, hydrates, solvates, crystal forms and individual diastereomers, and pharmaceutical compns. including the same and their use as inhibitors of tyrosine kinase enzymes and consequently their use in the prophylaxis and treatment of protein tyrosine kinase-associated disorders, such as immune diseases, hyperproliferative disorders and other diseases in which inappropriate protein kinase action is believed to play a role, such as cancer, angiogenesis, atherosclerosis, graft rejection, rheumatoid arthritis and psoriasis. In I, R1, R2 = independently H, halo, OH, SH, CN, NO2, alkyl, alkoxy, acyloxy, alkoxycarbonyloxy, carbamoyloxy, alkylthio, sulfinyl, sulfonyl, acyl, alkoxycarbonyl, carbamoyl, amino, acylamino, alkoxycarbonylamino, ureido, sulfamoyl, sulfonylamino, or R1 and R2 can join together to form a fused methylenedioxy ring or a fused 6-membered aromatic ring; terms such as 'alkyl' here and below are further defined in the claims. R3, R5 = independently H, C1-C6-alkyl unsubstituted or substituted with 1-3 substituents, aryl (Ph or naphthyl unsubstituted or substituted with 1-3 substituents), or R3 and R5 taken together can represent : O. R4 = H, C1-C6-alkyl, C1-C6-alkoxyl, or R4 and X can join together to form a 5- or 6-membered ring with substituted methylene or ethylene. X1, X2, X3, X4 in -X1:X2-X3:X4- are substituted CH or N where 0-2 of X1, X2, X3, X4 are N. X5 = N, CH. R7 = H, alkyl, alkoxy, amino. X = O, S, SO, SO2, imino. Z = C:O, SO2, substituted P(:O) (OH) or a single bond. 44 Example prepns. are given, but no preparative method is claimed and no data relating to the usefulness of the compds. are given.

IC ICM A61K-0031/506

ICS C07D-0403/04; C07D-0403/14; C07D-0413/14; C07D-0417/14

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1, 7, 63

IT Antiarteriosclerotics

(antiatherosclerotics; preparation of pyrimidine derivs. useful as)

IT Anti-inflammatory agents

Chemotherapy

(in combination with pyrimidine derivs. for inhibition of protein tyrosine kinase-associated disorders)

IT Anti-inflammatory agents

(nonsteroidal; in combination with pyrimidine derivs. for therapy of protein tyrosine kinase-associated disorders)

IT Angiogenesis inhibitors

Antirheumatic agents

Antitumor agents

(preparation of pyrimidine derivs. useful as)

IT Proliferation inhibition

```
(proliferation inhibitors; in combination with
        pyrimidine derivs. for inhibition of protein tyrosine kinase-associated
        disorders)
TT
                               66-25-1, Hexanal 78-84-2, Isobutyraldehyde
     51-17-2, Benzimidazole
                                      94-52-0, 5-Nitrobenzimidazole
     86-84-0, 1-Naphthyl isocyanate
     Benzenesulfonyl chloride 100-39-0, Benzyl bromide
                                                             103-71-9, Phenyl
     isocyanate, reactions
                             105-36-2, Ethyl bromoacetate
                                                             110-73-6,
                                                             141-90-2, Thiouracil
     2-(Ethylamino)ethanol
                             120-72-9, Indole, reactions
     500-22-1, 3-Pyridinecarboxaldehyde 501-53-1, Benzyl chloroformate
     661-69-8, Hexamethylditin
                                872-85-5, 4-Pyridinecarboxaldehyde
     1120-87-2, 4-Bromopyridine 1121-60-4, 2-Pyridinecarboxaldehyde 2762-32-5, Piperazine-2-carboxylic acid 3934-20-1, 2,4-
     Dichloropyrimidine 25495-92-5, Iodohexane 36082-50-5,
     2,4-Dichloro-5-bromopyrimidine 49844-90-8, 4-Chloro-2-
                            58632-95-4, 2-(tert-Butoxycarbonyloxyimino)-2-3183-34-3 146548-59-6, 2,4,6-Trimethoxybenzylamine
     methylthiopyrimidine
     phenylacetonitrile
                          73183-34-3
                     147650-70-2, (S)-Piperazine-2-carboxylic acid
     hydrochloride
     317365-90-5, N-Benzyloxycarbonyloxy-5-norbornene-2,3-dicarboxamide
     317365-91-6, (R*,S*)-2-(1-Hydroxyethyl)-4-
     benzyloxycarbonylmorpholine
                                    317365-92-7, 2-Methylthio-4-[5-
     iodobenzimidazol-1-yl]pyrimidine
                                         317830-67-4, 4-
     (Fluorenyloxycarbonyl)morpholine-2-carboxylic acid
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (for preparation of pyrimidine derivs. acting as inhibitors of Src-family
        protein tyrosine kinases)
TT
     53123-88-9, Rapamycin
                             104987-11-3, FK506
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (in combination with pyrimidine derivs. for therapy of protein tyrosine
        kinase-associated disorders)
TΤ
     934-22-5P, 5-Aminobenzimidazole 135782-20-6P,
     2-Hydroxymethyl-4-benzyloxycarbonylmorpholine
                                                       152192-95-5P,
     2-(N-Tert-Butyloxycarbonyl-N-ethyl)aminoethanol
                                                         293292-31-6P
     2-Chloro-4-(benzimidazol-1-yl)-5-bromopyrimidine
                                                         315716-98-4P,
     2-Hexylthio-4-[benzimidazol-1-yl]pyrimidine
                                                    315716-99-5P,
     2-Methylthio-4-[5-aminobenzimidazol-1-yl]pyrimidine 315717-00-1P,
     2-Hexylthio-4-[5-aminobenzimidazol-1-yl]pyrimidine
                                                           315717-71-6P.
     2-Methylthio-4-[benzimidazol-1-yl]pyrimidine
                                                     315717-72-7P,
     2-Hexylthio-4-hydroxypyrimidine
                                       315717-73-8P, 4-Chloro-2-
                           315718-04-8P, 2-Methylthio-4-[6-aminobenzimidazol-1-
     hexylthiopyrimidine
                     315718-06-0P, 2-(N-Tert-Butyloxycarbonyl-N-
     yl]pyrimidine
     ethyl)aminoacetaldehyde 317364-83-3P, 2-Methylsulfonyl-4-[benzimidazol-1-
                     317365-07-4P, (S,S)-1-Benzyloxycarbonyl-2-(1-aminoethyl)-4-
    yl]pyrimidine
     tert-butyloxycarbonylpiperazine
                                       317365-09-6P, 2-Methylsulfonyl-4-[5-(3-
     ethylimidazolidin-2-on-1-yl)benzimidazol-1-yl]-pyrimidine
                                                                  317365-12-1P
     317365-14-3P, 2-Methylthio-4-[5-(2-chloropyrimidin-4-yl)benzimidazol-1-
    yl]pyrimidine 317365-27-8P 317365-31-4P, 2-Aminomethyl-4-
                                   317365-32-5P, 2-[(Morpholin-2-
     benzyloxycarbonylmorpholine
    yl)methylamino]-4-[benzimidazol-1-yl]pyrimidine 317365-33-6P,
     1-(Benzyloxycarbonyl)-2-hydroxymethyl-4-(tert-butyloxycarbonyl)piperazine
     317365-34-7P, 1-(Benzyloxycarbonyl)-2-aminomethyl-4-(tert-
    butyloxycarbonyl)piperazine
                                    317365-35-8P, 2-[(1-(Benzyloxycarbonyl)-4-(N-
    naphth-1-ylcarbamoyl)piperazin-2-yl)methylamino]-4-[benzimidazol-1-
                     317365-36-9P, 4-Fluorenyloxycarbonylmorpholin-2-(N-methyl-
    yl]pyrimidine
    N-methoxy) carboxamide 317365-37-0P, 4-Benzyloxycarbonylmorpholin-
     2-(N-methyl-N-methoxy) carboxamide 317365-38-1P,
     2-Acetyl-4-benzyloxycarbonylmorpholine 317365-39-2P,
     (R*,R*)-2-(1-Hydroxyethyl)-4-benzyloxycarbonylmorpholine
    317365-40-5P, (R*,R*)-2-(1-Aminoethyl)-4-
    benzyloxycarbonylmorpholine 317365-41-6P, (R*,R*)-2-[1-(4-
     (Benzyloxycarbonyl)morpholin-2-yl)ethylamino]-4-[benzimidazol-1-
    yl)pyrimidine 317365-42-7P, (R*,S*)-2-(1-Aminoethyl)-4-
    benzyloxycarbonylmorpholine 317365-43-8P, (R*,S*)-2-[1-(4-
     ({\tt Benzyloxycarbonyl})\, {\tt morpholin-2-yl})\, {\tt ethylamino}]\, {\tt -4-[benzimidazol-1-incomplete]}\, {\tt and}\, {\tt orbital}
    yl)pyrimidine
                     317365-44-9P, 1-Benzyloxycarbonyl-4-tert-
    butyloxycarbonylpiperazin-2-(N-methyl-N-methoxy)carboxamide
    317365-45-0P, 1-Benzyloxycarbonyl-2-acetyl-4-tert-
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butyloxycarbonylpiperazine 317365-46-1P, (R*,R*)-1-Benzyloxycarbonyl-2-
(1-hydroxyethyl)-4-tert-butyloxycarbonylpiperazine 317365-47-2P,
(R*,R*)-1-Benzyloxycarbonyl-2-(1-aminoethyl)-4-tert-
butyloxycarbonylpiperazine 317365-48-3P, (R*,R*)-2-[1-(1-
(Benzyloxycarbonyl)-4-(tert-butyloxycarbonyl)piperazin-2-yl)ethylamino]-4-
                                317365-49-4P, (R*,R*)-2-[1-(1-
[benzimidazol-1-yl]pyrimidine
(Benzyloxycarbonyl)-4-(N-naphth-1-ylcarbamoyl)piperazin-2-yl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine 317365-50-7P, (R*,S*)-1-Benzyloxycarbonyl-
2-(1-hydroxyethyl)-4-tert-butyloxycarbonylpiperazine
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(R*,S*)-1-Benzyloxycarbonyl-2-(1-aminoethyl)-4-tert-
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butyloxycarbonylpiperazine
(Benzyloxycarbonyl)-4-(tert-butyloxycarbonyl)piperazin-2-yl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine
                               317365-53-0P, (R*,S*)-2-[1-(1-
(Benzyloxycarbonyl)-4-(N-naphth-1-ylcarbamoyl)piperazin-2-yl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine 317365-54-1P, 2-[1-(1-(Benzyloxycarbonyl)-
4-(tert-butyloxycarbonyl)piperazin-2-yl)ethylamino]-4-(benzimidazol-1-yl)-
                    317365-55-2P, 2-[1-(4-(Tert-Butyloxycarbonyl)piperazin-
5-bromopyrimidine
2-yl)ethylamino]-4-(benzimidazol-1-yl)pyrimidine
                                                   317365-56-3P,
2-[1-(1-(Benzyloxycarbonyl)-4-(N-naphth-1-ylcarbamoyl)piperazin-2-
yl)ethylamino]-4-(benzimidazol-1-yl)-5-bromopyrimidine
                                                         317365-57-4P,
-2-[7-Methyl-4-(N-tert-butyloxycarbonyl)-1,4,8-triazabicyclo[4.3.0]nonan-8-
                                      317365-58-5P, 2-[1-(1-Methyl-4-(tert-
yl]-4-[benzimidazol-1-yl]pyrimidine
butyloxycarbonyl)piperazin-2-yl)ethylamino]-4-[benzimidazol-1-
               317365-59-6P, 2-[Benzimidazol-1-yl]-4-methylthiopyrimidine
317365-60-9P, 2-[Benzimidazol-1-yl]-4-methylsulfonylpyrimidine
317365-61-0P, 2-[Benzimidazol-1-yl]-4-[1-(1-(benzyloxycarbonyl)-4-(tert-
butyloxycarbonyl)piperazin-2-yl)ethylamino]pyrimidine
                                                        317365-62-1P,
2-[Benzimidazol-1-yl]-4-[1-(1-(benzyloxycarbonyl)-4-(N-naphth-1-
ylcarbamoyl)piperazin-2-yl)ethylamino]pyrimidine
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(S)-1-Benzyloxycarbonyl-4-tert-butyloxycarbonylpiperazin-2-(N-methyl-N-
                      317365-64-3P, (S)-1-Benzyloxycarbonyl-2-acetyl-4-
methoxy) carboxamide
tert-butyloxycarbonylpiperazine
                                  317365-65-4P
                                                 317365-66-5P
317365-67-6P, 2-Methylsulfonyl-4-[indol-1-yl]pyrimidine
                                                          317365-68-7P,
2-{1-(1-(Benzyloxycarbonyl)-4-(tert-butyloxycarbonyl)piperazin-2-
yl)ethylamino]-4-(indol-1-yl)pyrimidine
                                         317365-69-8P,
2-[1-(1-(Benzyloxycarbonyl)-4-(N-naphth-1-ylcarbamoyl)piperazin-2-
yl)ethylamino]-4-(indol-1-yl)pyrimidine 317365-70-1P 317365-72-3P
317365-74-5P, 2-Methylthio-4-[5-(3-ethylimidazolidin-2-on-1-
yl)benzimidazol-1-yl]pyrimidine
                                  317365-75-6P, 2-[1-(1-
(Benzyloxycarbonyl)-4-(tert-butyloxycarbonyl)piperazin-2-yl)ethylamino]-4-
[5-(3-ethylimidazolidin-2-on-1-yl)benzimidazol-1-yl]pyrimidine
317365-76-7P, 2-[1-(1-(Benzyloxycarbonyl)-4-(N-naphth-1-
ylcarbamoyl)piperazin-2-yl)ethylamino]-4-[5-(3-ethylimidazolidin-2-on-1-
                                  317365-77-8P,
yl)benzimidazol-1-yl]pyrimidine
2-Methylthio-4-[5-trimethylstannylbenzimidazol-1-yl]pyrimidine
317365-78-9P, 2-Methylthio-4-[5-(pyridin-4-yl)benzimidazol-1-yl]pyrimidine 317365-79-0P, (S,S)-2-[1-(1-(Benzyloxycarbonyl)-4-(tert-
butyloxycarbonyl)piperazin-2-yl)ethylamino]-4-[5-(pyridin-4-
yl)benzimidazol-1-yl]pyrimidine 317365-80-3P, (S,S)-2-[1-(1-
(Benzyloxycarbonyl)-4-(N-naphth-1-ylcarbamoyl)piperazin-2-yl)ethylamino]-4-
[5-(pyridin-4-yl)benzimidazol-1-yl]pyrimidine
                                               317365-81-4P,
2-Methylthio-4-[5-(pinacolatoboronyl)benzimidazol-1-yl]pyrimidine
317365-82-5P, 2-Methylthio-4-[5-(2-(2,4,6-trimethoxybenzylamino)pyrimidin-
4-yl)benzimidazol-1-yl]pyrimidine
                                   317365-83-6P, 2-Methylsulfonyl-4-[5-(2-
(2,4,6-trimethoxybenzylamino)pyrimidin-4-yl)benzimidazol-1-yl]pyrimidine
317365-84-7P, (S,S)-2-[1-(1-(Benzyloxycarbonyl)-4-(tert-
butyloxycarbonyl)piperazin-2-yl)ethylamino]-4-[5-(2-(2,4,6-
trimethoxybenzylamino)pyrimidin-4-yl)benzimidazol-1-yl]pyrimidine
317365-85-8P, (S,S)-2-[1-(1-(Benzyloxycarbonyl)-4-(N-naphth-1-
ylcarbamoy1)piperazin-2-yl)ethylamino]-4-[5-(2-aminopyrimidin-4-
                                  317365-86-9P, (S,S)-2-[1-(1-
yl)benzimidazol-1-yl]pyrimidine
(Benzyloxycarbonyl)-4-(tert-butyloxycarbonyl)piperazin-2-yl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine
                               317365-87-0P, (S,S)-2-[1-(1-
(Benzyloxycarbonyl)-4-(N-naphth-1-ylcarbamoyl)piperazin-2-yl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine 317365-88-1P, (S,S)-2-[1-(4-(N-Naphth-1-
ylcarbamoyl)piperazin-2-yl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine
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317829-95-1P, Methyl 4-(fluorenyloxycarbonyl)morpholine-2-
     carboxylate 317829-96-2P, 2-Hydroxymethyl-4-
     (fluorenyloxycarbonyl)morpholine
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (intermediate; preparation of pyrimidine derivs. acting as inhibitors of
        Src-family protein tyrosine kinases)
IT
     317364-84-4P, 2-[(4-(Benzyloxycarbonyl)morpholin-2-yl)methylamino]-
     4-[benzimidazol-1-yl]pyrimidine
     RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or
     reagent); USES (Uses)
        (preparation as inhibitor of Src-family protein tyrosine kinases and
        deprotection of)
ΙT
     317365-91-6, (R*,S*)-2-(1-Hydroxyethyl)-4-
     benzyloxycarbonylmorpholine
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (for preparation of pyrimidine derivs. acting as inhibitors of Src-family
        protein tyrosine kinases)
     317365-91-6 HCAPLUS
RN
CN
     4-Morpholinecarboxylic acid, 2-[(1R)-1-hydroxyethyl]-, phenylmethyl ester,
     (2S)-rel- (9CI) (CA INDEX NAME)
```

Relative stereochemistry.

IT 53123-88-9, Rapamycin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (in combination with pyrimidine derivs. for therapy of protein tyrosine kinase-associated disorders)

RN 53123-88-9 HCAPLUS

CN Rapamycin (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

. Me

IT 135782-20-6P, 2-Hydroxymethyl-4-benzyloxycarbonylmorpholine 317365-31-4P, 2-Aminomethyl-4-benzyloxycarbonylmorpholine 317365-37-0P, 4-Benzyloxycarbonylmorpholin-2-(N-methyl-Nmethoxy)carboxamide 317365-38-1P, 2-Acetyl-4benzyloxycarbonylmorpholine 317365-39-2P, (R*,R*)-2-(1-Hydroxyethyl)-4-benzyloxycarbonylmorpholine 317365-40-5P, (R*,R*)-2-(1-Aminoethyl)-4-benzyloxycarbonylmorpholine 317365-41-6P, (R*,R*)-2-[1-(4-(Benzyloxycarbonyl)morpholin-2yl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine 317365-42-7P, (R*,S*)-2-(1-Aminoethyl)-4-benzyloxycarbonylmorpholine 317365-43-8P, (R*,S*)-2-[1-(4-(Benzyloxycarbonyl)morpholin-2yl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine 317829-95-1P, Methyl 4-(fluorenyloxycarbonyl)morpholine-2-carboxylate RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of pyrimidine derivs. acting as inhibitors of Src-family protein tyrosine kinases) RN 135782-20-6 HCAPLUS CN4-Morpholinecarboxylic acid, 2-(hydroxymethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

HO-CH₂ Ph

RN 317365-31-4 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-(aminomethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} O & O \\ H_2N-CH_2 & C-O-CH_2-Ph \end{array}$$

RN 317365-37-0 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[(methoxymethylamino)carbonyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 317365-38-1 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-acetyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 317365-39-2 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[(1R)-1-hydroxyethyl]-, phenylmethyl ester, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 317365-40-5 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[(1R)-1-aminoethyl]-, phenylmethyl ester, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 317365-41-6 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[(1R)-1-[(4-(1H-benzimidazol-1-yl))-2-pyrimidinyl]amino]ethyl]-, phenylmethyl ester, (2R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 317365-42-7 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[(1R)-1-aminoethyl]-, phenylmethyl ester, (2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 317365-43-8 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[(1R)-1-[[4-(1H-benzimidazol-1-yl)-2-pyrimidinyl]amino]ethyl]-, phenylmethyl ester, (2S)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 317829-95-1 HCAPLUS

CN 2,4-Morpholinedicarboxylic acid, 4-(9H-fluoren-9-yl) 2-methyl ester (9CI) (CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2001:12273 HCAPLUS DN 134:86271 TI Preparation of pyrimidine derivatives as Src-family protein tyrosine kinase inhibitor compounds TN Armstrong, Helen M.; Beresis, Richard; Goulet, Joung L.; Holmes, Mark A.; Hong, Xingfang; Mills, Sander G.; Parsons, William H.; Sinclair, Peter J.; Steiner, Mark G.; Wong, Frederick; Zaller, Dennis M. PA Merck & Co., Inc., USA PCT Int. Appl., 470 pp. SO CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE ----------PΤ WO2001000213 2000WO-US17443 20000626 <--A1 20010104 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,

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     EP---1206265
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             IE, SI, LT, LV, FI, RO, MK, CY, AL
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PRAI 1999US-141639P
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     MARPAT 134:86271
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What are claimed are pyrimidine compds. (shown as I), or their AB pharmaceutically acceptable salts, hydrates, solvates, crystal forms and individual diastereomers, and pharmaceutical compns. including the same and their use as inhibitors of tyrosine kinase enzymes and consequently their use in the prophylaxis and treatment of protein tyrosine kinase-associated disorders, such as immune diseases, hyperproliferative disorders and other diseases in which inappropriate protein kinase action is believed to play a role, such as cancer, angiogenesis, atherosclerosis, graft rejection, rheumatoid arthritis and psoriasis. In I, R1, R2 = independently H, halo, OH, SH, CN, NO2, alkyl, alkoxy, acyloxy, alkoxycarbonyloxy, carbamoyloxy, alkylthio, sulfinyl, sulfonyl, acyl, alkoxycarbonyl, carbamoyl, amino, acylamino, ureido, sulfamoyl, sulfonylamino, or R1 and R2 can join together to form a fused methylenedioxy ring or a fused 6-membered aromatic ring; terms such as 'alkyl' here and below are further defined in the claims. R3, R5 = independently H, C1-C6-alkyl unsubstituted or substituted with 1-3 substituents, aryl, or R3 and R5 taken together can represent :0; R3 or R5 can represent a 2 or 3 C methylene bridge forming a ring of 5-8 atoms fused to the A ring. R4 = H, C1-C6-alkyl, C1-C6-alkoxyl. X1, X2, X3, X4 in -X1:X2-X3:X4- are substituted or unsubstituted CH or N where 0-2 of X1, X2, X3, X4 are N. X5, X6 = independently N, C, optionally substituted CH. A ring = Ph, naphthyl, pyridyl, pyrazinyl, pyrimidinyl, pyrrolyl, thienyl, oxazolyl, isoxazolyl, thiazolyl, pyrazolyl, triazolyl, tetrazolyl, furanyl, benzothienyl, benzofuranyl, indolyl, imidazolyl, benzimidazolyl, thiadiazolyl. R7, R8, R9, R10 = independently H, halo, OH, SH, CN, NO2, N3, N2+BF4-, alkyl, alkoxy, alkylthio, sulfinyl, sulfonyl, C1-C6-alkyl, C1-C6-perfluoroalkyl, acyl, alkoxycarbonyl, carbamoyl, acyloxy, alkoxycarbonyloxy, carbamoyloxy, amino, acylamino, ureido, sulfamoyl, sulfonylamino, two of R7, R8, R9, and R10 when on adjacent carbons join together to form a methylenedioxy bridge. N = 0-2. More than 500 example prepns. are given, but no preparative method is claimed and no data

Ι

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relating to the usefulness of the compds. are given.
IC
     ICM A61K-0031/506
     ICS C07D-0401/14; C07D-0403/04; C07D-0403/14
CC
     28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1, 7, 63
     Antiarteriosclerotics
         (antiatherosclerotics; preparation of pyrimidine derivs. useful as)
IT
     Anti-inflammatory agents
       Chemotherapy
        (in combination with pyrimidine derivs. for inhibition of protein
        tyrosine kinase-associated disorders)
IT
     Anti-inflammatory agents
        (nonsteroidal; in combination with pyrimidine derivs. for
        therapy of protein tyrosine kinase-associated disorders)
TT
     Angiogenesis inhibitors
     Antirheumatic agents
       Antitumor agents
         (preparation of pyrimidine derivs. useful as)
TΤ
     Proliferation inhibition
        (proliferation inhibitors; in combination with
        pyrimidine derivs. for inhibition of protein tyrosine kinase-associated
        disorders)
IT
     53123-88-9, Rapamycin
                               104987-11-3, FK506
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (in combination with pyrimidine derivs. for therapy of protein tyrosine
        kinase-associated disorders)
IT
     267-87-8P, 5,6-Methylenedioxybenzimidazole
                                                    269-07-8P,
     Naphtho[2,3-d]imidazole
                                326-55-6P, 5-Trifluoromethylbenzimidazole
     934-22-5P, 5-Aminobenzimidazole
                                         1576-46-1P, 3-(N,N-
     Diethylaminosulfonyl) benzoic acid
                                          2223-96-3P, 2-Ethylthio-4-chloro-5-
                                    5518-76-3P, 2-(Ethylthio)-4-hydroxy-5-
     (ethoxycarbonyl)pyrimidine
     (ethoxycarbonyl)pyrimidine
                                    5731-17-9P, 1-Benzyl-3-
     hydroxymethylpyrrolidine 5973-83-1P, 3-Acetylpyridine hydroxime
     6148-64-7P, Potassium ethyl malonate 6287-83-8P, 5-Cyanobenzimidazole 6478-73-5P, 5,6-Dichlorobenzimidazole 13480-95-0P, 2-(Ethylthio)-4-
     hydroxy-5-methylpyrimidine 13480-96-1P, 2-(Ethylthio)-4-chloro-5-
     methylpyrimidine 13493-88-4P, N-Methylpyrrolidine-2-carboxaldehyde
     26663-77-4P, 5-Methoxycarbonylbenzimidazole
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     4-methylbenzoylacetate
                                38158-26-8P, 3-(N, N-Diethylaminosulfonyl) acetophe
            39807-30-2P, 3-Chloro-6-(3-dimethylaminopropan-1-oxy)pyridazine
     39945-51-2P, 1-Benzyloxycarbonyl-3-piperidinemethanol 41292-65-3P,
                               46118-11-0P, 2-Ethylthio-4-hydroxy-5-
     5-Hydroxybenzimidazole
     cyanopyrimidine
                        53449-18-6P, lin-Benzohypoxanthine
                                                                56129-55-6P,
     1-(3-Pyridyl)ethylamine
                                60189-64-2P, lin-Benzoxanthine
                                                                    61587-90-4P,
     6-Methyl-5-nitrobenzimidazole 62459-07-8P, 2-Ethylthio-4-hydroxy-6-propylpyrimidine 72351-49-6P, 1-Benzylpyrrolidine-3-carboxaldehyde
     76116-24-0P, (R)-1-(3-Nitrophenyl)ethanol 82718-15-8P,
     5-(Pyridin-4-yl)benzimidazole 86954-05-4P, 1-Benzyloxycarbonyl-2-
                           105706-75-0P, 1-Benzyloxycarbonyl-2-105706-76-1P, 1-Benzyloxycarbonylpiperidine-2-
     pyrrolidinemethanol
     piperidinemethanol
                       105706-84-1P, 1-Benzyloxycarbonylpyrrolidine-2-106429-29-2P, 5-Hydroxymethylbenzimidazole
     carboxaldehyde
     carboxaldehyde
     109943-02-4P, 5-Chloro-6-methylbenzimidazole
                                                      126937-42-6P, Methyl
     1-(benzyloxycarbonyl)-4-(tert-butyloxycarbonyl)piperazine-2-carboxylate
     127852-22-6P, (S)-1-(3-Cyanophenyl)ethylamine 135782-20-6P,
     4-Benzyloxycarbonyl-2-hydroxymethylmorpholine
                                                       157991-72-5P,
     2,5-Dimethyl-3-acetylfuran hydroxime 167993-16-0P, Benzimidazole-5,6-dicarboxylic anhydride 167993-17-1P, 5,6-Di(methoxycarbonyl)benzimidazol
         177843-72-0P, 5-Amino-6-methylbenzimidazole 179323-60-5P,
     1-(Pyrazin-2-yl)ethylamine
                                   192717-32-1P, 5-(N-Methyl-N-
     methoxyaminocarbonyl)benzimidazole
                                            201478-72-0P, 1-
     Benzyloxycarbonylpiperidine-3-carboxaldehyde
                                                       210827-43-3P,
     5-Aminosulfonylbenzimidazole 297730-25-7P, (S)-1-(3-Nitrophenyl)-1-
                  315716-98-4P, 2-Hexylthio-4-[benzimidazol-1-yl]pyrimidine
     aminoethane
     315716-99-5P, 2-Methylthio-4-[5-aminobenzimidazol-1-yl]pyrimidine
     315717-00-1P, 2-Hexylthio-4-[5-aminobenzimidazol-1-yl]pyrimidine
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315717-42-1P, 2-Hexylthio-4-[5-iodobenzimidazol-1-yl]pyrimidine
315717-64-7P, 2-Hexylthio-4-[5-(pyridin-4-yl)benzimidazol-1-yl]pyrimidine
315717-71-6P, 2-Methylthio-4-[benzimidazol-1-yl]pyrimidine
                                                             315717-72-7P,
2-Hexylthio-4-hydroxypyrimidine
                                315717-73-8P, 4-Chloro-2-
hexylthiopyrimidine
                      315717-85-2P, 2-Methylthio-4-[5-(N-methyl-N-
methoxyaminocarbonyl)benzimidazol-1-yl]pyrimidine
                                                    315717-86-3P,
2-Methylthio-4-[6-(N-methyl-N-methoxyaminocarbonyl)benzimidazol-1-
yl]pyrimidine
               315717-94-3P, 2-Hexylsulfinyl-4-[5-(pyridin-4-
yl)benzimidazol-1-yl]pyrimidine
                                 315717-98-7P, 2-Hexylthio-4-[5-
                                              315717-99-8P,
trimethylstannylbenzimidazol-1-yl]pyrimidine
2-Hexylsulfonyl-4-[5-(pyridin-4-yl)benzimidazol-1-yl]pyrimidine
315718-04-8P, 2-Methylthio-4-[6-aminobenzimidazol-1-yl]pyrimidine
317364-83-3P, 2-Methylsulfonyl-4-[benzimidazol-1-yl]pyrimidine
317365-33-6P, 1-(Benzyloxycarbonyl)-4-(tert-butyloxycarbonyl)-2-
hydroxymethylpiperazine
                         317824-78-5P, 2-[(S)-1-Phenylethylamino]-4-
chloropyrimidine
                  317826-53-2P, 2-[(S)-1-Phenylethylamino]-4-[6-(4-
tributylstannyl-1,2,3-triazol-1-yl)benzimidazol-1-yl]pyrimidine
317826-66-7P, 2-Ethylthio-4-(benzimidazol-1-yl)-5-
(ethoxycarbonyl)pyrimidine
                            317826-99-6P, 2-[(S)-1-Phenylethylamino]-4-[5-
(tributylstannyl)benzimidazol-1-yl]pyrimidine
                                                317828-02-7P,
2-[(S)-1-Phenylethylamino]-4-[5-trimethylstannylbenzimidazol-1-
               317829-65-5P, 3-(N,N-Diethylaminosulfonyl)-N-methoxy-N-
yl]pyrimidine
                  317829-66-6P, 3-(N,N-Diethylaminosulfonyl)acetophenone
methylbenzamide
                 317829-67-7P, 1-(3-N, N-Diethylaminosulfonylphenyl)ethylam
O-benzyl oxime
     317829-69-9P, (R)-1-(3-Cyanophenyl)ethanol
                                                  317829-71-3P,
(S)-1-(3-Cyanophenyl)-1-azidoethane
                                     317829-73-5P, Tert-Butyl
                    317829-74-6P, (R)-1-(3-Tert-
(3-acetyl)benzoate
                                 317829-75-7P, (R)-1-(3-Tert-
Butyloxycarbonylphenyl)ethanol
Butyloxycarbonylphenyl)ethyl methanesulfonyl ether
                                                     317829-76-8P,
(S)-1-(3-Tert-Butyloxycarbonylphenyl)-1-azidoethane
                                                     317829-77-9P.
                                                  317829-78-0P,
(S)-1-(3-Tert-Butyloxycarbonylphenyl)ethylamine
2-Methylthio-4-[5-carboxybenzimidazol-1-yl]pyrimidine
                                                        317829-79-1P,
                                                        317829-80-4P,
2-Methylthio-4-[6-carboxybenzimidazol-1-yl]pyrimidine
2-Methylsulfonyl-4-[5-carboxybenzimidazol-1-yl]pyrimidine
                                                            317829-81-5P.
2-Methylsulfonyl-4-[6-carboxybenzimidazol-1-yl]pyrimidine
                                                            317829-83-7P.
2-[(S)-1-Phenylethylamino]-4-[5-carboxybenzimidazol-1-yl]pyrimidine
317829-84-8P, 2-[(S)-1-Phenylethylamino]-4-[6-carboxybenzimidazol-1-
                317829-86-0P, 2-Methylthio-4-[6-N-
yl]pyrimidine
(benzoyl) aminobenzimidazol-1-yl] pyrimidine
                                             317829-88-2P,
2-Methylsulfonyl-4-[6-N-(benzoyl)aminobenzimidazol-1-yl]pyrimidine
317829-90-6P, 5-(4-Formylaminophenoxy)benzimidazole
                                                     317829-92-8P,
2-[(S)-1-Phenylethylamino]-4-[5-N-((S)-1-(benzyloxycarbonyl)pyrrolidin-2-
oyl)aminobenzimidazol-1-yl]pyrimidine
                                       317829-93-9P, 2-[(S)-1-
Phenylethylamino]-4-[5-N-(N-(tert-butyloxycarbonyl)piperidin-4-
                                       317829-94-0P, 2-[(S)-1-
oyl)aminobenzimidazol-1-yl]pyrimidine
Phenylethylamino]-4-[5-N-(N-(tert-butyloxycarbonyl)piperidin-3-
oyl)aminobenzimidazol-1-yl]pyrimidine 317829-95-1P
317829-96-2P 317829-97-3P, 4-Benzyloxycarbonylmorpholine-2-
carboxaldehyde
                 317829-98-4P, 1-(Benzyloxycarbonyl)-4-(tert-
butyloxycarbonyl)piperazine-2-carboxaldehyde
                                               317829-99-5P,
2-[(S)-1-Phenylethylamino]-4-[5-N-((1-benzyloxycarbonylpiperazin-2-
yl) methyl) aminobenzimidazol-1-yl] pyrimidine
                                              317830-00-5P,
2-Methylthio-4-[5-N-(tert-butyloxycarbonyl)aminobenzimidazol-1-
               317830-01-6P, 2-Methylsulfonyl-4-[5-N-(tert-
yl]pyrimidine
butyloxycarbonyl)aminobenzimidazol-1-yl]pyrimidine
                                                    317830-02-7P,
2-Methylthio-4-[6-(methylcarbonyl)benzimidazol-1-yl]pyrimidine
                                                       317830-04-9P,
317830-03-8P, 2-Ethylthio-4-chloro-5-cyanopyrimidine
                                                      317830-05-0P,
2-Ethylthio-4-(benzimidazol-1-yl)-5-cyanopyrimidine
2-Ethylthio-4-(benzimidazol-1-yl)-5-methylpyrimidine
                                                       317830-06-1P,
                                                          317830-07-2P,
2-[(S)-1-Phenylethylamino]-4-hydroxy-6-methylpyrimidine
2-[(S)-1-Phenylethylamino]-4-chloro-6-methylpyrimidine
                                                         317830-08-3P,
2-Ethylthio-4-chloro-6-propylpyrimidine
                                          317830-09-4P,
                                                       317830-10-7P,
2-Ethylthio-4-[benzimidazol-1-yl]-6-propylpyrimidine
2-Ethylsulfonyl-4-[benzimidazol-1-yl]-6-propylpyrimidine
2-[(S)-1-Phenylethylamino]-4,6-dichloropyrimidine
                                                    317830-12-9P,
2-[(S)-1-Phenylethylamino]-4-[benzimidazol-1-yl]-6-chloropyrimidine
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317830-13-0P, 2-[(S)-1-Phenylethylamino]-4-[5-methylbenzimidazol-1-yl]-6-
chloropyrimidine 317830-14-1P, 2-[(S)-1-Phenylethylamino]-4-[6-
methylbenzimidazol-1-yl]-6-chloropyrimidine
                                               317830-15-2P,
2-[1-(3-Nitrophenyl)ethylamino]-4,6-dichloropyrimidine
                                                           317830-16-3P.
2-[1-(3-Nitrophenyl)ethylamino]-4-[benzimidazol-1-yl]-6-chloropyrimidine
317830-17-4P, 2-[(S)-1-Phenylethylamino]-4-[benzimidazol-1-yl]-6-
azidopyrimidine
                  317830-18-5P, 2-[1-(1-N-tert-Butoxycarbonylindol-3-
yl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine
                                                  317830-19-6P,
2-[1-(N-tert-Butoxycarbonylimidazol-4-yl)ethylamino]-4-[benzimidazol-1-
               317830-20-9P, 1-(2,5-Dimethylfuran-3-yl)ethylamine
yl]pyrimidine
317830-21-0P, 2-[(S)-1-Phenylethylamino]-4-[5-(2-(3,4,5-
trimethoxybenzylamino) pyrimidin-4-yl) benzimidazol-1-yl] pyrimidine
317830-22-1P, 5-(4-Aminophenoxy)benzimidazole
                                                317830-23-2P
317830-24-3P, Benzimidazol-5,6-N-benzylsuccinimide
                                                      317830-25-4P,
2-[(S)-1-(3-(N-Methoxy-N-methylamino)phenyl)ethylamino]-4-[benzimidazol-1-
yl]pyrimidine
                317830-26-5P, (S)-1-(3-Nitrophenyl)-1-azidoethane
317830-29-8P, (S)-1-(3-Aminophenyl)-1-aminoethane
                                                      317830-31-2P,
2-[(S)-1-(3-Aminophenyl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine
317830-33-4P, 5-Nitro-1-((2-trimethylsilylethoxy)methyl)benzimidazole
317830-35-6P, 5-Amino-1-((2-trimethylsilylethoxy)methyl)benzimidazole
317830-37-8P, 6-Amino-1-((2-trimethylsilylethoxy)methyl)benzimidazole
317830-39-0P, 5-Iodo-1((2-trimethylsilylethoxy)methyl)benzimidazole
317830-44-7P, 6-Iodo-1-((2-trimethylsilylethoxy)methyl)benzimidazole
              317830-49-2P
317830-46-9P
                              317830-51-6P, 5-(Pyridin-4-yl)-1-((2-
trimethylsilylethoxy) methyl) benzimidazole
                                            317830-52-7P,
6-(Pyridin-4-yl)-1-((2-trimethylsilylethoxy)methyl)benzimidazole
317830-54-9P, 2-[(S)-1-Phenylethylamino]-4-[5-(pyridin-4-yl)benzimidazol-1-
yl]-6-chloropyrimidine
                          317830-56-1P, 2-[(S)-1-Phenylethylamino]-4-[6-
(pyridin-4-yl)benzimidazol-1-yl]-6-chloropyrimidine
                                                        318283-75-9P,
(S)-1-Phenylethylguanidine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (intermediate; preparation of pyrimidine derivs. as Src-family protein
   tyrosine kinase inhibitor compds.)
315717-70-5P, 2-Hexylthio-4-[6-aminobenzimidazol-1-yl]pyrimidine
317823-66-8P, 2-[(S)-1-Phenylethylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-67-9P, 2-[(R)-1-Phenylethylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-68-0P, 2-[(S)-1-Phenylethyl-N-methylamino]-4-[benzimidazol-1-
                317823-69-1P, 2-Benzylamino-4-[benzimidazol-1-317823-71-5P, 2-[Diphenylmethylamino]-4-[benzimidazol-1-317823-72-6P, 2-[2-Phenylethylamino]-4-[benzimidazol-1-
yl]pyrimidine
yl]pyrimidine
yl]pyrimidine
                317823-73-7P, 2-[3,4-Methylenedioxybenzylamino]-4-
yl]pyrimidine
[benzimidazol-1-yl]pyrimidine
                               317823-74-8P, 2-[2,3-Dichlorobenzylamino]-
4-[benzimidazol-1-yl]pyrimidine
                                  317823-75-9P, 2-[1-Phenyl-1-
methylethylamino] -4-[benzimidazol-1-yl]pyrimidine
                                                      317823-76-0P,
2-[2-Pyridylmethylamino]-4-[benzimidazol-1-yl]pyrimidine
                                                             317823-77-1P,
2-[2-(2-Methoxyphenyl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-78-2P, 2-[1-Naphthylmethylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-79-3P, 2-[4-Methylbenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-81-7P, 2-[2-Methylbenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-82-8P, 2-[3-Methylbenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-83-9P, 2-[4-Methoxybenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-84-0P, 2-[2-Methoxybenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-85-1P, 2-[3-Methoxybenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-86-2P, 2-[2-Furanylmethylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-87-3P, 2-[(4-Fluorobenzyl)amino]-4-[benzimidazol-1-yl]pyrimidine 317823-88-4P, 2-[4-Trifluoromethoxybenzylamino]-4-[benzimidazol-1-
               317823-89-5P, 2-[3-Trifluoromethylbenzylamino]-4-
yl]pyrimidine
[benzimidazol-1-yl]pyrimidine 317823-91-9P, 2-[3,4-Dichlorobenzylamino]-
4-[benzimidazol-1-yl]pyrimidine
                                   317823-92-0P, 2-[2-Fluorobenzylamino]-4-
                               317823-93-1P, 2-[2-Chlorobenzylamino]-4-
[benzimidazol-1-yl]pyrimidine
[benzimidazol-1-yl]pyrimidine
                                 317823-94-2P, 2-[2-Chloro-6-
methylbenzylamino] -4-[benzimidazol-1-yl]pyrimidine
                                                       317823-95-3P,
2-[3-Chlorobenzylamino]-4-[benzimidazol-1-yl]pyrimidine
                                                            317823-96-4P,
2-[3,5-Dichlorobenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-97-5P, 2-[3-Fluorobenzylamino]-4-[benzimidazol-1-yl]pyrimidine
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317823-98-6P, 2-[3-Bromobenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317823-99-7P, 2-[3-Phenylbenzylamino]-4-[benzimidazol-1-y1]pyrimidine
317824-00-3P, 2-[3,5-Difluorobenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317824-01-4P, 2-[2-Bromobenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317824-02-5P, 2-[3-Iodobenzylamino]-4-[benzimidazol-1-yl]pyrimidine
317824-03-6P, 2-[3-Fluoro-5-trifluoromethylbenzylamino]-4-[benzimidazol-1-
yl]pyrimidine
                317824-04-7P, 2-[3-Nitrobenzylamino]-4-[benzimidazol-1-
                317824-05-8P, 2-[4-Chlorobenzylamino]-4-[benzimidazol-1-
yl]pyrimidine
yl]pyrimidine
                317824-06-9P, 2-[(S)-1-(1-Naphthyl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine
                               317824-07-0P, 2-[(S)-1-(2-
Naphthyl) ethylamino] -4-[benzimidazol-1-yl] pyrimidine
                                                       317824-08-1P,
2-[(S)-1-Phenylpropylamino]-4-[benzimidazol-1-yl]pyrimidine
317824-09-2P, 2-[3,5-Bis(trifluoromethyl)benzylamino]-4-[benzimidazol-1-
                317824-10-5P, 2-[(S)-1-Phenyl-2-hydroxyethylamino]-4-
yl]pyrimidine
                               317824-13-8P, 2-[4-Pyridylmethylamino]-4-317824-14-9P, 2-[(R)-1-(3-
[benzimidazol-1-yl]pyrimidine
[benzimidazol-1-yl]pyrimidine
Nitrophenyl) ethylamino] -4-[benzimidazol-1-yl] pyrimidine
                                                           317824-15-0P,
2-[(S)-1-(4-Methylphenyl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine
317824-16-1P, 2-[((S)-1-(3-N,N-Diethylaminosulfonylphenyl)ethyl)amino]-4-
[benzimidazol-1-yl]pyrimidine
                               317824-17-2P, 2-[((S)-1-(3-
Pyridyl)ethyl)amino]-4-[benzimidazol-1-yl]pyrimidine
                                                       317824-18-3P,
2-[(S)-1-(3-Cyanophenyl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine
317824-22-9P, 2-[(S)-1-(3-(Benzylaminocarbonyl)phenyl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine 317824-23-0P, 2-[(S)-1-(3-(1-
Naphthylaminocarbonyl) phenyl) ethylamino] -4- [benzimidazol-1-yl] pyrimidine
317824-24-1P, 2-[(S)-1-(3-(1-Ethylaminocarbonyl)phenyl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine
                               317824-25-2P, 2-[(S)-1-(3-
(Phenylaminocarbonyl) phenyl) ethylamino] -4- [benzimidazol-1-yl] pyrimidine
317824-26-3P, 2-[(S)-1-(3-(2-Phenylethylaminocarbonyl)phenyl)ethylamino]-4-
[benzimidazol-1-yl]pyrimidine
                               317824-27-4P, 2-[(S)-1-(3-
(Ethoxycarbonyl)phenyl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine
317824-28-5P, 2-[(S)-1-(3-(N-Benzyl-N-methylaminocarbonyl)phenyl)ethylamin
o]-4-[benzimidazol-1-yl]pyrimidine 317824-29-6P, 2-[(S)-1-(3-((S)-1-
Phenylethylaminocarbonyl) phenyl) ethylamino] -4- [benzimidazol-1-
              317824-30-9P, 2-[(S)-1-(3-((4-
yl]pyrimidine
Pyridylmethyl)aminocarbonyl)phenyl)ethylamino]-4-[benzimidazol-1-
yl]pyrimidine 317824-31-0P, 2-[(S)-1-(3-(Indol-5-
ylaminocarbonyl)phenyl)ethylamino]-4-[benzimidazol-1-yl]pyrimidine
317824-32-1P, 2-[(S)-1-(3-((4-Chlorophenyl)aminocarbonyl)phenyl)ethylamino
]-4-[benzimidazol-1-yl]pyrimidine
                                    317824-33-2P, 2-[(S)-1-(3-((4-
Methoxyphenyl)aminocarbonyl)phenyl)ethylamino]-4-[benzimidazol-1-
                317824-34-3P, 2-[(S)-1-Phenylethylamino]-4-[5-
methylbenzimidazol-1-yl]pyrimidine
                                     317824-35-4P, 2-[(S)-1-
Phenylethylamino] -4-[2-methylbenzimidazol-1-yl]pyrimidine
                                                            317824-37-6P.
2-[(S)-1-Phenylethylamino]-4-[5,6-dimethylbenzimidazol-1-yl]pyrimidine
317824-38-7P, 2-[(S)-1-Phenylethylamino]-4-[5-methoxybenzimidazol-1-
               317824-39-8P, 2-[(S)-1-Phenylethylamino]-4-[5-
yl]pyrimidine
nitrobenzimidazol-1-yl]pyrimidine
                                   317824-40-1P, 2-[(S)-1-
Phenylethylamino] -4-[5-bromobenzimidazol-1-yl]pyrimidine
                                                          317824-41-2P,
2-[(S)-1-Phenylethylamino]-4-[5-methylbenzotriazol-1-yl]pyrimidine
317824-43-4P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(acetyl)aminobenzimidazol-
                  317824-44-5P, 2-[(S)-1-Phenylethylamino]-4-[6-N-
1-yl)pyrimidine
(acetyl)aminobenzimidazol-1-yl]pyrimidine
                                           317824-45-6P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(pyridin-3-oyl)aminobenzimidazol-1-
yl]pyrimidine
               317824-46-7P, 2-[(S)-1-Phenylethylamino]-4-[6-N-(pyridin-3-
oyl)aminobenzimidazol-1-yl]pyrimidine
                                        317824-47-8P, 2-[(S)-1-
Phenylethylamino] -4-[5-N-(pyridin-4-oyl)aminobenzimidazol-1-yl]pyrimidine
317824-48-9P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(3-
bromobenzoyl)aminobenzimidazol-yl]pyrimidine
                                              317824-49-0P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(thiophen-2-oyl)aminobenzimidazol-1-
                317824-50-3P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(2-
yl]pyrimidine
methylbenzoyl)aminobenzimidazol-1-yl]pyrimidine
                                                  317824-52-5P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(4-methoxybenzoyl)aminobenzimidazol-1-
yl]pyrimidine
               317824-53-6P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(furan-2-
oyl) aminobenzimidazol-1-yl] pyrimidine 317824-54-7P, 2-[(S)-1-
Phenylethylamino]-4-[6-N-(furan-2-oyl)aminobenzimidazol-1-yl]pyrimidine
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317824-55-8P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(benzoyl)aminobenzimidazol-
1-y1]pyrimidine 317824-56-9P, 2-[(S)-1-Phenylethylamino]-4-[6-N-
(benzoyl) aminobenzimidazol-1-yl] pyrimidine
                                            317824-57-0P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(naphth-1-oyl)aminobenzimidazol-1-
yl]pyrimidine
               317824-58-1P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
(phenylacetyl)aminobenzimidazol-1-yl]pyrimidine
                                                  317824-59-2P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(1-phenylpropionoyl)aminobenzimidazol-1-
                317824-60-5P, 2-[(S)-1-Phenylethylamino]-4-[6-N-(1-
yl]pyrimidine
phenylpropionoyl) aminobenzimidazol-1-yl] pyrimidine
                                                    317824-61-6P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(benzyloxyacetyl)aminobenzimidazol-1-
yl]pyrimidine 317824-62-7P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
(naphthylene-2-sulfonyl)aminobenzimidazol-1-yl]pyrimidine
                                                           317824-63-8P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(allyl)aminobenzimidazol-1-yl]pyrimidine
317824-64-9P, 2-[(S)-1-Phenylethylamino]-4-[6-N-(allyl)aminobenzimidazol-1-
yl]pyrimidine
                317824-65-0P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
                                           317824-66-1P,
(benzyl) aminobenzimidazol-1-yl] pyrimidine
2-[(S)-1-Phenylethylamino]-4-[5-N-(3,3-dimethylallyl)aminobenzimidazol-1-
                317824-67-2P, 2-[(S)-1-Phenylethylamino]-4-[5-N,N-
yl]pyrimidine
dimethylaminobenzimidazol-1-yl]pyrimidine
                                           317824-68-3P,
2-[(S)-1-Phenylethylamino]-4-[5-(2-methylphenyl)benzimidazol-1-
yl]pyrimidine
                317824-69-4P, 2-[(S)-1-Phenylethylamino]-4-[5-(n-
butyl)benzimidazol-1-yl]pyrimidine
                                    317824-70-7P, 2-[(S)-1-
Phenylethylamino] -4-[6-methoxycarbonylbenzimidazol-1-yl]pyrimidine
317824-71-8P, 2-[(S)-1-Phenylethylamino]-4-[6-
benzylaminocarbonylbenzimidazol-1-yl]pyrimidine
                                                  317824-72-9P,
2-[(S)-1-Phenylethylamino]-4-[6-phenylaminocarbonylbenzimidazol-1-
                317824-73-0P, 2-((S)-1-(3-Nitrophenyl)ethylamino)-4-[5-
yl]pyrimidine
                                     317824-74-1P, 2-[(1-(3-
methylbenzimidazol-1-yl]pyrimidine
Nitrophenyl) ethyl) amino] -4-[6-N-(benzoyl) aminobenzimidazol-1-yl] pyrimidine
317824-75-2P, 2-(1-(3-Nitrophenyl)ethylamino)-4-[5-N-
                                             317824-76-3P,
(benzoyl) aminobenzimidazol-1-yl] pyrimidine
2-[(S)-1-Phenylethylamino]-4-[5-azabenzimidazol-1-yl]pyrimidine
317824-77-4P, 2-[(S)-1-Phenylethylamino]-4-[6-azabenzimidazol-1-
                317824-79-6P, 2-[(S)-1-Phenylethylamino]-4-[5-
yl]pyrimidine
(methoxycarbonyl)benzimidazol-1-yl]pyrimidine
                                               317824-80-9P,
2-[(S)-1-Phenylethylamino]-4-[5-(phenylamino)benzimidazol-1-yl]pyrimidine
317824-81-0P, 2-[(S)-1-Phenylethylamino]-4-[5-methyl-6-aminobenzimidazol-1-
                317824-82-1P, 2-[(S)-1-Phenylethylamino]-4-[4-
yl]pyrimidine
                                                      317824-83-2P,
trifluoromethyl-5-aminobenzimidazol-1-yl]pyrimidine
2-[(S)-1-Phenylethylamino]-4-[4-nitro-5-methylbenzimidazol-1-yl]pyrimidine
317824-84-3P, 2-[(S)-1-Phenylethylamino]-4-[5,6-dichlorobenzimidazol-1-
                317824-85-4P, 2-[(S)-1-Phenylethylamino]-4-[5-
yl]pyrimidine
trifluoromethylbenzimidazol-1-yl]pyrimidine
                                              317824-86-5P,
2-[(S)-1-Phenylethylamino]-4-[5-(4-formylaminophenoxy)benzimidazol-1-
                317824-87-6P, 2-[(S)-1-Phenylethylamino]-4-[5-chloro-6-
yl]pyrimidine
                                    317824-88-7P, 2-[(S)-1-
methylbenzimidazol-1-yl]pyrimidine
Phenylethylamino] -4-[5,6-methylenedioxybenzimidazol-1-yl]pyrimidine
317824-89-8P, 2-[(S)-1-Phenylethylamino]-4-[5-aminosulfonylbenzimidazol-1-
                317824-90-1P, 2-[(S)-1-Phenylethylamino]-4-[5,6-
yl]pyrimidine
di(methoxycarbonyl)benzimidazol-1-yl]pyrimidine
                                                 317824-91-2P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(2-methoxybenzoyl)aminobenzimidazol-1-
                317824-92-3P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(3-
yl]pyrimidine
methoxybenzoyl)aminobenzimidazol-1-yl]pyrimidine
                                                   317824-93-4P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3-methylbenzoyl)aminobenzimidazol-1-
                317824-94-5P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(4-
yl]pyrimidine
methylbenzoyl) aminobenzimidazol-1-yl] pyrimidine
                                                  317824-95-6P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3-chlorobenzoyl)aminobenzimidazol-1-
yl]pyrimidine 317824-96-7P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(4-
chlorobenzoyl) aminobenzimidazol-1-yl] pyrimidine
                                                 317824-97-8P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(propanoyl)aminobenzimidazol-1-
                317824-99-0P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
yl]pyrimidine
(butanoyl)aminobenzimidazol-1-yl]pyrimidine
                                              317825-01-7P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3,4-dimethylbenzoyl)aminobenzimidazol-1-
                317825-02-8P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(2,4-
yl]pyrimidine
                                                   317825-03-9P,
dimethylbenzoyl)aminobenzimidazol-1-yl]pyrimidine
2-[(S)-1-Phenylethylamino]-4-[5-N-(3,4-methylenedioxybenzoyl)aminobenzimid
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317825-04-0P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
azol-1-yl]pyrimidine
(picolinoyl) aminobenzimidazol-1-yl] pyrimidine 317825-05-1P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(benzofuran-2-oyl)aminobenzimidazol-1-
yl]pyrimidine
                317825-06-2P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(4-N,N-
dimethylaminobenzoyl)aminobenzimidazol-1-yl]pyrimidine
                                                         317825-07-3P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3-N, N-dimethylaminobenzoyl)aminobenzimi
                        317825-08-4P, 2-((S)-1-Phenylethylamino)-4-[5-N-(3-
dazol-1-yl]pyrimidine
butenoylamino) benzimidazol-1-yl] pyrimidine
                                            317825-09-5P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3,4-dimethoxybenzoyl)aminobenzimidazol-
                  317825-10-8P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(2,4-
1-yl]pyrimidine
dimethoxybenzoyl)aminobenzimidazol-1-yl]pyrimidine
                                                    317825-11-9P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(2,3-dimethoxybenzoyl)aminobenzimidazol-
1-y1]pyrimidine 317825-12-0P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(3,5-
dimethoxybenzoyl) aminobenzimidazol-1-yl] pyrimidine 317825-13-1P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(2,5-dimethoxybenzoyl)aminobenzimidazol-
1-yl]pyrimidine
                  317825-14-2P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(2,6-
dimethoxybenzoyl)aminobenzimidazol-1-yl]pyrimidine
                                                     317825-15-3P,
2-[(S)-1-Phenylethylamino]-4-[5-N-((E)-3-phenyl-2-
propencyl) aminobenzimidazol-1-yl] pyrimidine
                                              317825-16-4P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(2-methylpropanoyl)aminobenzimidazol-1-
yl]pyrimidine
                317825-17-5P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
(pentanoyl) aminobenzimidazol-1-yl] pyrimidine
                                             317825-18-6P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3-methylbutanoyl)aminobenzimidazol-1-
yl]pyrimidine 317825-19-7P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
(pivaloyl)aminobenzimidazol-1-yl]pyrimidine 317825-20-0P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(trifluoroacetyl)aminobenzimidazol-1-
                317825-21-1P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
yl]pyrimidine
(cyclohexanoyl) aminobenzimidazol-1-yl] pyrimidine
                                                   317825-22-2P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(cyclopentanoyl)aminobenzimidazol-1-
                317825-23-3P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(3-N,N-
yl]pyrimidine
diethylaminopropanoyl)aminobenzimidazol-1-yl]pyrimidine
                                                         317825-24-4P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(N, N-dimethylaminoacetyl)aminobenzimidaz
ol-1-yl]pyrimidine
                    317825-25-5P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(4-
N, N-dimethylaminobutanoyl) aminobenzimidazol-1-yl] pyrimidine
317825-28-8P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(benzimidazol-5-
oyl)aminobenzimidazol-1-yl]pyrimidine
                                       317825-29-9P, 2-[(S)-1-
Phenylethylamino]-4-[5-N-(indol-2-oyl)aminobenzimidazol-1-yl]pyrimidine
317825-30-2P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(imidazol-4-
oyl)aminobenzimidazol-1-yl]pyrimidine
                                       317825-31-3P, 2-[(S)-1-
Phenylethylamino]-4-[5-N-((S)-2-pyrrolidon-5-oyl)aminobenzimidazol-1-
              317825-32-4P, 2-[(S)-1-Phenylethylamino]-4-[5-N-((R)-2-
yl]pyrimidine
pyrrolidon-5-oyl)aminobenzimidazol-1-yl]pyrimidine
                                                    317825-33-5P,
2-[(S)-1-Phenylethylamino]-4-[5-N-((S)-1-methylpyrrolidin-2-
oyl) aminobenzimidazol-1-yl] pyrimidine
                                       317825-39-1P, 2-[(S)-1-
Phenylethylamino]-4-[5-N-((R)-pyrrolidin-2-oyl)aminobenzimidazol-1-
yl]pyrimidine
               317825-40-4P, 2-[(S)-1-Phenylethylamino]-4-[5-N-((S)-
piperidin-2-oyl)aminobenzimidazol-1-yl]pyrimidine
                                                   317825-41-5P,
2-[(S)-1-Phenylethylamino]-4-[5-N-((R)-piperidin-2-oyl)aminobenzimidazol-1-
yl]pyrimidine
                317825-42-6P, 2-[(S)-1-Phenylethylamino]-4-[5-N-((R)-3-
hydroxypyrrolidin-5-oyl)aminobenzimidazol-1-yl]pyrimidine
                                                            317825-43-7P,
2-[(S)-1-Phenylethylamino]-4-[5-N-((S)-pyrrolidin-2-oyl)aminobenzimidazol-
                  317825-45-9P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
1-yl]pyrimidine
(piperidin-4-oyl)aminobenzimidazol-yl]pyrimidine
                                                  317825-46-0P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(piperidin-3-oyl)aminobenzimidazol-1-
yl]pyrimidine
               317825-47-1P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(4-
methoxybenzyl)aminobenzimidazol-1-yl]pyrimidine
                                                 317825-48-2P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3-methoxybenzyl)aminobenzimidazol-1-
yl]pyrimidine 317825-49-3P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(2-
methoxybenzyl)aminobenzimidazol-1-yl]pyrimidine
                                                 317825-50-6P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3,4-methylenedioxybenzyl)aminobenzimida
                      317825-51-7P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(3,4-
zol-1-yl]pyrimidine
dimethoxybenzyl)aminobenzimidazol-1-yl]pyrimidine
                                                    317825-52-8P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(2,4-dimethoxybenzyl)aminobenzimidazol-1-
yl]pyrimidine
               317825-53-9P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(2,3-
dimethoxybenzyl)aminobenzimidazol-1-yl]pyrimidine
                                                   317825-54-0P,
2-[(S)-1-Phenylethylamino]-4-[5-N-(3,5-dimethoxybenzyl)aminobenzimidazol-1-
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yl]pyrimidine
                    317825-56-2P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(2,6-
    dimethoxybenzyl)aminobenzimidazol-1-yl]pyrimidine 317825-57-3P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-(2,5-dimethoxybenzyl)aminobenzimidazol-1-
    yl]pyrimidine
                   317825-58-4P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(2-
    methylpropyl)aminobenzimidazol-1-yl]pyrimidine
                                                     317825-59-5P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-(1-pentyl)aminobenzimidazol-1-
    yl]pyrimidine
                    317825-60-8P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(3-
    methylbutyl)aminobenzimidazol-1-yl]pyrimidine
                                                    317825-61-9P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-(2,2-dimethyl-1-propyl)aminobenzimidazol-
    1-yl]pyrimidine
                      317825-62-0P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
    (cyclohexylmethyl)aminobenzimidazol-1-yl]pyrimidine
                                                          317825-63-1P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-(2,2-dimethyl-3-N,N-
    dimethylaminopropyl)aminobenzimidazol-1-yl]pyrimidine
                                                            317825-66-4P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-((1-benzyloxycarbonylpiperidin-2-
    yl)methyl)aminobenzimidazol-1-yl]pyrimidine 317825-67-5P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-((1-benzyloxycarbonylpiperidin-3-
    yl)methyl)aminobenzimidazol-1-yl]pyrimidine 317825-68-6P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-((4-benzyloxycarbonylmorpholin-2-
    yl)methyl)aminobenzimidazol-1-yl]pyrimidine
                                                  317825-73-3P
, 2-[(S)-1-Phenylethylamino]-4-[5-N-((pyrrolidin-3-yl)methyl)aminobenzimidazol-
                      317825-75-5P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
    1-yl]pyrimidine
    ((piperidin-3-yl)methyl)aminobenzimidazol-1-yl]pyrimidine 317825-76-6P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-((morpholin-2-
    yl) methyl) aminobenzimidazol-1-yl] pyrimidine
                                                  317825-80-2P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-((piperazin-2-
    yl) methyl) aminobenzimidazol-1-yl] pyrimidine
                                                  317825-82-4P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-((tert-butyloxycarbonyl)methyl)aminobenz
    imidazol-1-yl]pyrimidine
                               317825-83-5P, 2-[(S)-1-Phenylethylamino]-4-[5-N-
    methyl-N-((1-methylpyrrolidin-2-yl)methyl)aminobenzimidazol-1-
                    317825-84-6P, 2-[(S)-1-Phenylethylamino]-4-[5-N-methyl-N-
    yl]pyrimidine
    ((4-methylmorpholin-2-yl)methyl)aminobenzimidazol-1-yl]pyrimidine
    317825-87-9P, 2-[(S)-1-Phenylethylamino]-4-[5-N-methyl-N-((pyrrolidin-2-
    yl)methyl)aminobenzimidazol-1-yl]pyrimidine
                                                  317825-95-9P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-methyl-N-((1-methyl-4-phenylpiperidin-4-
    yl)methyl)aminobenzimidazol-1-yl]pyrimidine
                                                  317825-99-3P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-(2-aminoethyl)aminobenzimidazol-1-
                   317826-07-6P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(((R)-
    yl]pyrimidine
    piperidin-2-yl)methyl)aminobenzimidazol-1-yl]pyrimidine
    2-[(S)-1-Phenylethylamino]-4-[5-(1,3-diazabicyclo[3.3.0]oct-3-
    yl)benzimidazol-1-yl]pyrimidine
                                     317826-09-8P, 2-[(S)-1-Phenylethylamino]-
    4-[6-(1,3-diazabicyclo[3.3.0]oct-3-yl)benzimidazol-1-yl]pyrimidine
    317826-11-2P, 2-[(S)-1-Phenylethylamino]-4-[5-((S)-1,3-
    diazabicyclo[3.3.0]octan-2-on-3-yl)benzimidazol-1-yl]pyrimidine
    317826-12-3P, 2-[(S)-1-Phenylethylamino]-4-[5-(1,3-
    diazabicyclo[4.3.0]nonan-2-on-3-yl)benzimidazol-1-yl]pyrimidine
    317826-13-4P, 2-[(S)-1-Phenylethylamino]-4-[6-(1,3-
    diazabicyclo[3.3.0]octan-2-on-3-yl)benzimidazol-1-yl]pyrimidine
    317826-14-5P, 2-[(S)-1-Phenylethylamino]-4-[5-(1,3-
    diazabicyclo[3.3.0]octan-2-on-3-yl)-6-methylbenzimidazol-1-yl]pyrimidine
    317826-15-6P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(N-
    phenylcarbamoyl)aminobenzimidazol-1-yl]pyrimidine
                                                        317826-17-8P.
    2-[(S)-1-Phenylethylamino]-4-[5-N-(N-methylcarbamoyl)aminobenzimidazol-1-
                    317826-18-9P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(N-
    yl]pyrimidine
    ethylcarbamoyl)aminobenzimidazol-1-yl]pyrimidine
                                                       317826-19-0P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-(N-propylcarbamoyl)aminobenzimidazol-1-
    yl]pyrimidine
                    317826-20-3P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(N-((1-
    methylethyl)carbamoyl)amino)benzimidazol-1-yl]pyrimidine 317826-21-4P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-(N-butylcarbamoyl)aminobenzimidazol-1-
                   317826-22-5P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(N-(1,1-
    yl]pyrimidine
    dimethylethyl) carbamoyl) aminobenzimidazol-1-yl] pyrimidine
                                                               317826-23-6P,
    2-[(S)-1-Phenylethylamino]-4-[5-N-(N-hexylcarbamoyl)aminobenzimidazol-1-
                    317826-24-7P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(N-
    yl]pyrimidine
    cyclohexylcarbamoyl)aminobenzimidazol-1-yl]pyrimidine
                                                            317826-25-8P
    2-[(S)-1-Phenylethylamino]-4-[5-N-(N-allylcarbamoyl)aminobenzimidazol-1-
    yl]pyrimidine
                    317826-26-9P, 2-[(S)-1-Phenylethylamino]-4-[5-N-(N-
    benzylcarbamoyl) aminobenzimidazol-1-yl]pyrimidine
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2-[(S)-1-Phenylethylamino]-4-[5-N-(methylsulfonyl)aminobenzimidazol-1-
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     (dimethylphosphonyl) aminobenzimidazol-1-yl] pyrimidine
    2-[(S)-1-Phenylethylamino]-4-[5-(tetrazol-1-yl)benzimidazol-1-
                    317826-40-7P, 2-[(S)-1-(3-Nitrophenyl)ethylamino]-4-[5-
    yl]pyrimidine
     (1,3-diazabicyclo[3.3.0]octan-2-on-3-yl)benzimidazol-1-yl]pyrimidine
    317826-41-8P, 2-[(S)-1-(3-Trifluoromethylphenyl)ethylamino]-4-[5-(1,3-
    diazabicyclo [3.3.0] octan-2-on-3-yl) benzimidazol-1-yl] pyrimidine
    317826-42-9P, 2-[(S)-1-(3-Nitrophenyl)ethylamino]-4-[5-(1,3-
    diazabicyclo[3.3.0]oct-3-yl)benzimidazol-1-yl]pyrimidine
                                                                317826-47-4P,
    2-[(S)-1-Phenylethylamino]-4-[5-phenylbenzimidazol-1-yl]pyrimidine
    317826-48-5P, 2-[(S)-1-Phenylethylamino]-4-[5-(thien-2-yl)benzimidazol-1-
                    317826-49-6P, 2-[(S)-1-Phenylethylamino]-4-[5-(furan-2-
    vl]pyrimidine
    yl)benzimidazol-1-yl]pyrimidine 317826-50-9P, 2-[(S)-1-Phenylethylamino]-
    4-[5-vinylbenzimidazol-1-yl]pyrimidine 317826-51-0P,
    2-[(S)-1-Phenylethylamino]-4-[5-(4-ethoxycarbonyl-1,2,3-triazol-1-
                                     317826-52-1P, 2-[(S)-1-Phenylethylamino]-
    yl)benzimidazol-1-yl]pyrimidine
     4-[6-(4-ethoxycarbonyl-1,2,3-triazol-1-yl)benzimidazol-1-yl]pyrimidine
    317826-54-3P, 2-[(S)-1-Phenylethylamino]-4-[6-(1,2,3-triazol-1-
    yl)benzimidazol-1-yl]pyrimidine
                                     317826-55-4P, 2-[(S)-1-Phenylethylamino]-
     4-[6-(4-(pyridin-2-yl)-1,2,3-triazol-1-yl)benzimidazol-1-yl]pyrimidine
    317826-56-5P, 2-[(S)-1-Phenylethylamino]-4-[6-(4-phenyl-1,2,3-triazol-1-
    yl)benzimidazol-1-yl]pyrimidine
                                     317826-58-7P, 2-[(S)-1-Phenylethylamino]-
     4-[5-acetylbenzimidazol-1-yl]pyrimidine
                                              317826-59-8P,
    2-[(S)-1-Phenylethylamino]-4[-5-(ethylcarbonyl)benzimidazol-1-
                   317826-60-1P, 2-[(S)-1-Phenylethylamino]-4-[5-
    yl]pyrimidine
     (benzylcarbonyl)benzimidazol-1-yl]pyrimidine
                                                   317826-61-2P,
    2-[(S)-1-Phenylethylamino]-4-[5-(1-hydroxyethyl)benzimidazol-1-
                    317826-62-3P, 2-[(S)-1-Phenylethylamino]-4-[6-
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                                 317826-68-9P, 2-Ethylsulfonyl-4-(benzimidazol-
     (ethoxycarbonyl)pyrimidine
     1-yl)-5-methylpyrimidine 317826-69-0P, 2-Methylthio-4-(benzimidazol-1-
    yl)-6-chloropyrimidine
                              317826-70-3P, 2-[(S)-1-Phenylethylamino]-4-
     [benzimidazol-1-yl]-6-methylpyrimidine 317826-72-5P,
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     317826-73-6P, 2-[(S)-1-Phenylethylamino]-4-[benzimidazol-1-yl]-6-
                               317826-74-7P, 2-[(S)-1-Phenylethylamino]-4-
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     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (preparation of pyrimidine derivs. as Src-family protein tyrosine kinase
        inhibitor compds.)
     53123-88-9, Rapamycin
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (in combination with pyrimidine derivs. for therapy of protein tyrosine
        kinase-associated disorders)
     53123-88-9 HCAPLUS
                     (CA INDEX NAME)
     Rapamycin (9CI)
Absolute stereochemistry.
```

TT

RN

CN

Double bond geometry as shown.

PAGE 2-A

` Me

IT 135782-20-6P, 4-Benzyloxycarbonyl-2-hydroxymethylmorpholine 317829-95-1P 317829-97-3P, 4-Benzyloxycarbonylmorpholine-2-carboxaldehyde

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; preparation of pyrimidine derivs. as Src-family protein tyrosine kinase inhibitor compds.)

RN 135782-20-6 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-(hydroxymethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

RN 317829-95-1 HCAPLUS

CN 2,4-Morpholinedicarboxylic acid, 4-(9H-fluoren-9-yl) 2-methyl ester (9CI) (CA INDEX NAME)

RN 317829-97-3 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-formyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

IT 317825-68-6P, 2-[(S)-1-Phenylethylamino]-4-[5-N-((4-

benzyloxycarbonylmorpholin-2-yl)methyl)aminobenzimidazol-1-yl]pyrimidine

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of pyrimidine derivs. as Src-family protein tyrosine kinase

inhibitor compds.)

RN 317825-68-6 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[[1-[2-[[(1S)-1-phenylethyl]amino]-4-pyrimidinyl]-1H-benzimidazol-5-yl]amino]methyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN AN 2000:15173 HCAPLUS

```
DN
     132:64526
TI
     Preparation of amino acid derivatives as N type calcium channel inhibitors
IN
     Seko, Takuya; Kato, Masashi
     Ono Pharmaceutical Co., Ltd., Japan
PA
so
     PCT Int. Appl., 237 pp.
     CODEN: PIXXD2
     Patent
DT
     Japanese
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                                            APPLICATION NO.
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     MARPAT 132:64526
OS
     The title compds. R1ANR2CH(DER3)COJR4 [R1 = alkyl, etc.; A = CO, etc.; R2
AB
     = H, (un) substituted alkyl; D = alkylene, etc.; E = OCO, etc.; R3 =
     heterocyclic ring, etc.; J = O, etc.; R4 = alkyl, etc.] are prepared The
     title compds. are useful as preventives and/or remedies for brain
     infarction, transient ischemic attack, cerebrospinal failure following
     heart operation, spinal vascular failure, stress hypertension, neurosis,
     epilepsy, asthma, frequent urination, etc., or analgesics. In an in vitro
     test (using cells) for N type calcium channel inhibiting activity,
     (2R)-N-(1-benzylpiperidin-4-yl)-3-cyclohexylmethylthio-2-((4R)-3-tert-
     butoxycarbonylthiazolidin-4-ylcarbonylamino)propanamide at 3 µM gave
     95% inhibition of calcium inflow. Formulations containing the title compds.
     are given.
     ICM C07C-0323/60
IC
         C07D-0417/12; C07D-0409/12; C07D-0211/58; C07D-0211/26; C07D-0277/06;
          C07D-0207/14; C07D-0295/18; C07D-0295/12; C07D-0213/74; C07K-0005/06;
          A61K-0031/445; A61K-0031/425; A61K-0031/535; A61K-0031/495;
          A61K-0031/165
CC
     34-2 (Amino Acids, Peptides, and Proteins)
     Section cross-reference(s): 1, 27, 28, 63
IT
     Analgesics
     Antiasthmatics
       Anticonvulsants
      Antihypertensives
     Ischemia
        (preparation and effect of amino acid derivs. with N type calcium channel
        inhibiting activity)
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study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
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   (preparation of amino acid derivs. as N type calcium channel inhibitors)
253307-25-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
use); BIOL (Biological study); PREP (Preparation); USES (Uses)
   (preparation of amino acid derivs. as N type calcium channel inhibitors)
253307-25-4 HCAPLUS
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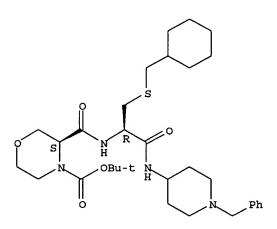
4-Morpholinecarboxylic acid, 3-[[[(1R)-1-[[(cyclohexylmethyl)thio]methyl]-2-oxo-2-[[1-(phenylmethyl)-4-piperidinyl]amino]ethyl]amino]carbonyl]-,

Absolute stereochemistry.

IT

RN

CN



THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 5 ALL CITATIONS AVAILABLE IN THE RE FORMAT

1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN L28 ΑN 1999:582647 HCAPLUS DN 131:214124

TI

Substituted azetidinones as anti-inflammatory and antidegenerative agents

```
Doherty, James; Dorn, Conrad; Durette, Philippe; Finke, Paul; Maccoss,
IN
     Malcolm; Mills, Sander; Shah, Shrenik; Sahoo, Soumya; Hagmann, William;
     Polo, Scott
PA
     Merck and Co., Inc., USA
     U.S., 42 pp.
CODEN: USXXAM
SO
DT
     Patent
LA
     English
FAN.CNT 1
     PATENT NO.
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     US---5952321
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                          Α
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PRAI 1996US-0764775
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OS
     MARPAT 131:214124
GI
```

Ι

II

AB New substituted azetidinones I [R = alkyl; R1 = alkyl, alkoxyalkyl; M = H, alkyl, hydroxyalkyl, haloalkyl, alkenyl, alkoxyalkyl; R2, R3 = H, alkyl, halo, CO2H, alkoxy, Ph, alkylcarbonyl, dialkylamino; or R2R3 = OCH2O, OCH:CH; R4 = H, alkyl, alkoxyalkyl, cyclopropyl; R5 = H, alkyl, alkoxyalkyl, various substituted alkyls; or NR4R5 = (un)substituted piperidino, piperazino, (thio) morpholino, pyrrolidino, pyrrolo, imidazolo; R6 = H, alkyl, alkoxyalkyl; or R5R6 = atoms to form (un)saturated monocyclic heterocyclic ring; R7 = H, halo, alkyl, OH, alkoxy; n = 0-5], which have been found to be potent elastase inhibitors and thereby useful as anti-inflammatory and antidegenerative agents, are described. For example, the azetidinone derivative II (R8 = CO2H) [preparation from racemic 3,3-diethyl-4-acetoxyazetidin-2-one given] underwent reduction by BH3.SMe2 (84%) to give II (R8 = CH2OH), which underwent bromination by Br2 and PPh3 in THF to give II (R8 = CH2Br). The latter, without isolation, reacted with MeOCH2CH2NHEt and Et3N to give 55% II (R8 = CH2NEtCH2CH2OMe) (III). III inhibited the proteolytic activity of human neutrophil elastase in vitro, with Kobs/[I] = 565,000 mol-1·sec-1. Approx. 130 I are described, with elastase inhibition data for most compds.

IC ICM C07D-0205/08 ICS A61K-0031/395

INCL 514210000

```
CC
     26-5 (Biomolecules and Their Synthetic Analogs)
     Section cross-reference(s): 1, 7
IT
     Antitumor agents
        (leukemia, preparation of substituted azetidinones as elastase inhibitors)
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IT
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        (preparation of substituted azetidinones as antiinflammatories)
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     4-Morpholinecarboxylic acid, 2-[[[4-[[(2S)-3,3-diethyl-1-[[[(1R)-1-(4-
CN
     methylphenyl)butyl]amino]carbonyl]-4-oxo-2-azetidinyl]oxy]phenyl]methyl]me
     thylamino]ethyl ester (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

PAGE 1-B

`Me

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN L28

AN 1999:518285 HCAPLUS

DN 131:144789

Preparation of steroidal glycosides as hypocholesterolemic and TI antiatherosclerosis agents

IN Deninno, Michael Paul

MARPAT 131:144789

PΑ Pfizer Inc., USA

so U.S., 34 pp., Cont. of U.S. Ser. No. 652,478. CODEN: USXXAM

DT Patent

LА English

FAN.CNT 1

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ΡI	US5939398	A	19990817	1998US-0009037	19980120 <									
PRAI	1996US-0652478	A1	19960618	<										

os GI

AB This invention relates to certain steroidal glycosides useful as hypocholesterolemic agents and antiatherosclerosis agents and certain protected intermediates useful in the preparation of said steroidal glycosides. The title compds. [I; X = CO, (R) - or (S) -CH(OH); Y = CO, CH2, (R) - or (S)-CH(OH); R1 - R3 = H, OH, halo, NH2, N3, C1-6 alkoxy-C1-6 alkoxy, Z-R4; wherein Z = NHCO, O2C, CO2, NR5, NHCONR5, OCSNR5; R4 = each (un) substituted aryl, aryl-C1-6 alkyl, C2-4 alkenyl, C1-6 alkyl, C3-7 cycloalkyl, or C3-7 cycloalkyl-C1-6 alkyl; wherein R5 = H, C1-4 alkyl; NR5 and R4 which is a covalent bond are taken together to form pyrrolidinyl, piperidinyl, N-methylpiperazinyl, indolinyl, or morpholinyl each optionally substituted on the C atom with C1-4 alkoxycarbonyl], useful for the treatment of hypercholesterolemia and atherosclerosis, are prepared

Ι

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Thus, (3\beta, 5\alpha, 25R) - 3 - [4'' - (2 - fluorophenylcarbamoyl) - \beta - D -
     cellobiosyl]oxy]spirostan-11-one was prepared for the treatment of
     hypercholesterolemia and atherosclerosis. However, an effective dosage is
     in the range of 0.005 to 20 mg/kg/day, preferably 0.01 to 5 mg/kg/day,
    most preferably 0.01 to 1 mg/kg/day. For an average 70 kg human, this would
     amount to 0.00035 to 1.4 g/day, preferably 0.0007 to 0.35 g/day, most
     preferably 0.0007 to 0.07 g/day. In one mode of administration the
     compds. of this invention are taken with meals.
    ICM A61K-0031/705
IC
     ICS C07J-0071/00
INCL 514026000
CC
     33-4 (Carbohydrates)
     Section cross-reference(s): 1, 32, 63
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    Antiarteriosclerotics
     Anticholesteremic agents
        (preparation of steroidal glycosides as hypocholesterolemic and
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        (preparation of steroidal glycosides as hypocholesterolemic and
        antiatherosclerotic agents)
RN
     171660-42-7 HCAPLUS
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     Spirostan-11-one, 3-[[4-0-[4,6-bis-0-(4-morpholinylcarbonyl)-\beta-D-
     glucopyranosyl]-\beta-D-glucopyranosyl]oxy]-, (3\beta,5\alpha,25R)-
            (CA INDEX NAME)
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Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN AN 1999:468088 HCAPLUS

DN

TI Preparation of morpholineacetates as GABAA antagonists

IN Kuo, Shen-chun; Blythin, David J.; Kreutner, William

PA Schering Corp., USA

so

U.S., 27 pp. CODEN: USXXAM

DTPatent

LА English

FAN. CNT 2

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     1994WO-US02803
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     MARPAT 131:116239
OS
     RZCHR3R4 [I; R = H, (phenyl)alkyl, alkoxycarbonyl, etc.; R3 = H or
AB
     (hydroxy)alkyl; R4 = CO2H, alkoxycarbonyl, CONH2, P(O)(OH)2, etc.; Z = (un)substituted (thio)morpholine-4,2-diyl] were prepared Thus, HOCH2CMe2NH2
     was N-alkylated by BrCH2CH:CHCO2Et and the product cyclized to give Et
     5,5-dimethylmorpholine-2-acetate. Data for biol. activity of I were
     given.
IC
     ICM C07D-0417/00
     ICS C07D-0413/00
INCL 544060000
     28-13 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1
TT
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        (petit mal, treatment; preparation of morpholineacetates as GABAA
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        (preparation of morpholineacetates as GABAA antagonists)
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     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
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        (preparation of morpholineacetates as GABAA antagonists)
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CN
     (CA INDEX NAME)
            CH_2 - CO_2H
     160415-09-8 HCAPLUS
RN
     2-Morpholineacetic acid, 4-[(1,1-dimethylethoxy)carbonyl]-5,5-dimethyl-,
     ethyl ester, (+)- (9CI) (CA INDEX NAME)
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Rotation (+).

RN 160415-10-1 HCAPLUS

CN 2-Morpholineacetic acid, 4-[(1,1-dimethylethoxy)carbonyl]-5,5-dimethyl-, ethyl ester, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

RN 160415-40-7 HCAPLUS

CN 2-Morpholineacetic acid, 5,5-dimethyl-4-[(phenylmethoxy)carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 160415-41-8 HCAPLUS

CN 2-Morpholineacetic acid, 4-[(1,1-dimethylethoxy)carbonyl]-5,5-dimethyl-,
ethyl ester (9CI) (CA INDEX NAME)

RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:804132 HCAPLUS

DN 130:33009

TI A method of treating cancer using an antineoplastic agent-prenyl-protein transferase inhibitor combination, and compound preparation

IN Rosen, Neal; Sepp-lorenzino, Laura; Moasser, Mark M.; Oliff, Allen I.; Gibbs, Jackson B.; Kohl, Nancy; Graham, Samuel L.; Prendergast, George C.

PA Merck & Co., Inc., USA; Sloan-Kettering Institute for Cancer Research

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so
     PCT Int. Appl., 379 pp.
     CODEN: PIXXD2
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     Patent
     English
LA
FAN.CNT 1
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                                                                        DATE
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         US, UZ, VN, YU

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PRAI 1997US-048736P
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     Methods are provided for treating cancer using a combination of a compound
AB
     which is an antineoplastic agent and a compound which is a inhibitor of
     prenyl-protein transferase. The methods comprise administering to a
     mammal, either sequentially in any order or simultaneously, amts. of
     ≥2 therapeutic agents selected from a compound which is an
     antineoplastic agent and a compound which is an inhibitor or prenyl-protein
     transferase. The invention also relates to methods of preparing such compns.
IC
     ICM A01N-0043/50
     ICS A01N-0043/60; A61K-0031/415; A61K-0031/495
     1-6 (Pharmacology)
CC
     Section cross-reference(s): 8, 34, 63
ΙT
     Alkylating agents, biological
       Antitumor agents
     Cell cycle
     Drug delivery systems
     Drug interactions
         (antineoplastic agent-prenyl-protein transferase inhibitor combination
        for treating cancer, and compound preparation)
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     50-07-7, Mitomycin C 50-18-0, Cyclophosphamide
                                                            50-44-2,
     6-Mercaptopurine 51-21-8, 5-Fluorouracil 52-24-4, Thiotepa
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RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
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160141-75-3P
                                           160141-78-6P
              160141-76-4P
                             160141-77-5P
                                                          160141-79-7P
210037-29-9P
              210037-30-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
   (preparation and reaction; antineoplastic agent-prenyl-protein transferase
   inhibitor combination for treating cancer, and compound preparation)
148-82-3, Melphalan 671-16-9, Procarbazine
865-21-4, Vinblastine 1404-00-8, Mitomycin
3778-73-2, Ifosfamide 10540-29-1, Tamoxifen
11056-06-7, Bleomycin 20830-81-3, Daunorubicin
23214-92-8, Doxorubicin 29767-20-2, Teniposide
33069-62-4, Paclitaxel 90357-06-5, Bicalutamide
100286-90-6, CPT-11
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
```

IT

IT

(antineoplastic agent-prenyl-protein transferase inhibitor combination for treating cancer, and compound preparation)

RN 148-82-3 HCAPLUS

CN L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 671-16-9 HCAPLUS

CN Benzamide, N-(1-methylethyl)-4-[(2-methylhydrazino)methyl]- (9CI) (CA INDEX NAME)

RN 865-21-4 HCAPLUS

CN Vincaleukoblastine (6CI, 8CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 1404-00-8 HCAPLUS

CN Mitomycin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 3778-73-2 HCAPLUS

CN 2H-1,3,2-Oxazaphosphorin-2-amine, N,3-bis(2-chloroethyl)tetrahydro-, 2-oxide (9CI) (CA INDEX NAME)

RN 10540-29-1 HCAPLUS

CN Ethanamine, 2-[4-[(1Z)-1,2-diphenyl-1-butenyl]phenoxy]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

$$\begin{array}{c} \text{Ph} \\ \text{Z} \\ \text{Et} \\ \\ \text{Ph} \end{array}$$

RN 11056-06-7 HCAPLUS

CN Bleomycin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

RN 20830-81-3 HCAPLUS

Absolute stereochemistry.

RN 23214-92-8 HCAPLUS

CN 5,12-Naphthacenedione, 10-[(3-amino-2,3,6-trideoxy-α-L-lyxo-hexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S,10S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 29767-20-2 HCAPLUS

CN Furo [3',4':6,7] naphtho [2,3-d] -1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[4,6-0-[(R)-2-thienylmethylene]- β -D-glucopyranosyl]oxy]-, (5R,5aR,8aR,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 33069-62-4 HCAPLUS

Absolute stereochemistry. Rotation (-).

RN 90357-06-5 HCAPLUS

CN Propanamide, N-[4-cyano-3-(trifluoromethyl)phenyl]-3-[(4-fluorophenyl)sulfonyl]-2-hydroxy-2-methyl- (9CI) (CA INDEX NAME)

RN 100286-90-6 HCAPLUS

CN [1,4'-Bipiperidine]-1'-carboxylic acid, (4S)-4,11-diethyl-3,4,12,14-tetrahydro-4-hydroxy-3,14-dioxo-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinolin-9-yl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

PAGE 1-A

PAGE 2-A

HCl

Absolute stereochemistry.

RN 160141-22-0 HCAPLUS
CN 4-Morpholinecarboxylic acid, 5-[(1S)-1-methylpropyl]-3-oxo-2(phenylmethyl)-, 1,1-dimethylethyl ester, (2S,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

AU---9737834

PRAI 1996JP-0211278

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

A1

Α

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L28 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
     1998:126257 HCAPLUS
AN
DN
     128:192649
TI
     Preparation of imidazo[2,1-b]benzothiazole derivatives as metabotropic
     glutamate receptor agonists
     Hayashibe, Satoshi; Itahana, Hirotsune; Yahiro, Kiyoshi; Tsukamoto,
IN
     Shin-Ichi; Okada, Masamichi; Yamashita, Hiroshi
PA
     Yamanouchi Pharmaceutical Co., Ltd., Japan
SO
     PCT Int. Appl., 148 pp.
     CODEN: PIXXD2
DT
     Patent
     Japanese
T.A
FAN.CNT 1
     PATENT NO.
                          KIND
                                  DATE
                                              APPLICATION NO.
                                                                       DATE
                          ----
                                  ------
                                              -----
ΡI
     WO---9806724
                           A1
                                  19980219
                                              1997WO-JP02748
                                                                       19970807 <--
         W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH,
             HU, IL, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG,
             MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM,
             TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,
             GN, ML, MR, NE, SN, TD, TG
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19980306

19960809

<--

1997AU-0037834

19970807 <--

1997WO-JP02748 MARPAT 128:192649 v 19970807 <--

OS GI

I

AB Disclosed are medicinal compns. containing compds. represented by general formula [I; the ring A = an optionally substituted aryl, monocyclicheterocycle or dicyclic heterocycle group; R1 = H, halogeno, lower alkyl, hydroxy-lower alkyl, lower alkoxy-lower alkyl or lower alkoxy; R8-R11 = H, halogeno, lower alkyl, cyano, NO2, alkoxy, Y1-OR6, Y1-O-Y2-OR6, Y1-O-Y2-SR6, Y1-O-Y2-COR6, Y1-O-Y2-CO2R6, Y1-O-Y3-CONR6R7, Y1-O-Y2-NR6R7, Y1-S-Y2-OR6, Y1-S-Y2-SR6, Y1-SO-R6, Y1-SO2-R6, Y1-SO2-OR6, heterocyclylcarbonyl, etc.; wherein Y1 = bond, alkylene; Y2 = lower alkylene; R6, R7 = H, lower alkyl, C3-8 cycloalkyl, (un) substituted aryl, phenyl-lower alkyl] or pharmaceutically acceptable salts thereof having metabotropic glutamate receptor agonism and thus being useful as remedies for various diseases which can be cured or relieved thereby, in particular, convulsion, epilepsy, pain, Parkinson's syndrome, disorders of brain blood vessel, and an after effect (sequela) of external head trauma; the use of these compds. for producing these compns.; and methods for treating the above-mentioned diseases through the administration of these compds. in effective dosages. Thus, 7-ethoxycarbonyl-2-phenylimidazo[2,1b]benzothiazole was reduced by LiAlH4 in THF under ice-cooling for 2 h to 7-hydroxymethyl-2-phenylimidazo[2,1-b]benzothiazole which was treated with NaH in DMF and methylated by Me iodide to give the title compound (II). II in vitro inhibited 100% glutamic acid-induced elevation of Ca++ in NIH3T3 cells.

IC ICM C07D-0513/04

ICS A61K-0031/425; C07D-0513/04; C07D-0235/00; C07D-0277/00

28-9 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 1

IT Analgesics

Anticonvulsants Glutamate agonists Parkinson's disease

(preparation of imidazo[2,1-b]benzothiazole derivs. as metabotropic glutamate receptor agonists for treatment of diseases)

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IT
                    203446-67-7P
     203446-65-5P
                                    203446-68-8P
                                                   203446-69-9P
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     203446-74-6P
                    203446-75-7P
                                    203446-76-8P
                                                   203446-77-9P
                                                                   203446-78-0P
     203446-80-4P
                    203446-81-5P
                                    203446-82-6P
                                                   203446-83-7P
                                                                   203446-84-8P
     203446-85-9P
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    203446-98-4P
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     203447-05-6P
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203447-13-6P 203447-14-7P 203447-15-8P 203447-20-5P 203447-21-6P 203447-22-7P 203447-23-8P 203447-24-9P 203447-25-0P 203447-26-1P 203447-29-4P 203447-30-7P 203447-31-8P 203447-32-9P 203447-33-0P 203447-35-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of imidazo[2,1-b]benzothiazole derivs. as metabotropic glutamate receptor agonists for treatment of diseases)

IT 203447-05-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of imidazo[2,1-b]benzothiazole derivs. as metabotropic glutamate receptor agonists for treatment of diseases)

RN 203447-05-6 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-(2-phenylimidazo[2,1-b]benzothiazol-7-yl)-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:81044 HCAPLUS

DN 128:192655

TI Preparation of 4-phenylpyridine derivatives as endothelin antagonists

IN Sakurai, Kuniya; Niwa, Seiji; Oono, Seiji; Uchita, Hirohisa

PA Ajinomoto Co., Inc., Japan

SO Jpn. Kokai Tokkyo Koho, 95 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

TAN: CNI I						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP10029979	A2	19980203	1997JP-0093782	19970411 <	
PRAI	1996JP-0091272	Α	19960412	<		
os	MARPAT 128:192655					

GI

- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB The title compds. (I; R1 R11 = H, halo, OH, NH2, NO2, lower alkyl, alkoxy, alkenyl, alkylamino, alkylthio, alkanoyl, hydroxyalkyl, hydroxyalkoxy, hydroxyalkenyl, haloalkyl, haloalkoxy, or haloalkenyl, aryl-lower alkoxy, aroyl; or two of R1 R5 groups or two of R7 R11 groups are linked to each other to form a ring; R6 = an acidic functional group; R12 = aryl, heteroaryl, heterocyclylcarbonyl, or groups listed for R1 R5 and R7 R11; X = CR13R14, NR15, O, S; Y = NR16, O, S, CR17:CR18;

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R13 - R18 = H, lower alkyl; Z = H, OH, CO2H, lower alkoxycarbonyl,
aryloxycarbonyl, heteroaryloxycarbonyl, alkylcarbamoyl, arylcarbamoyl,
heteroarylcarbamoyl, NH2, alkylamino, arylamino, heteroarylamino,
acylamino, O2CNR19R20, NR21CONR22R23, O-CO2R24, NR25CO2R26, OR27, O2CR28;
R19 - R28 = H, lower alkyl, aryl, heteroaryl; or R19 and R20, R21 and R22,
R21 and R23, R22 and R23, or R25 and R26 are bonded to each other to form a ring; m = 0.1; n = 0.3) are prepared They are useful for the treatment of
hypertension, Raynaud's disease, acute kidney failure, myocardial
infarction, angina pectoris, cerebral infarction, atrophy of brain blood
vessels, arteriosclerosis, bronchial asthma, stomach ulcer, acute liver
failure, diabetes, endotoxin shock, multi-organ failure, disseminated
intravascular agglutination, and/or cyclosporin-induced kidney disorders.
Thus, 3-cyano-5-(3-hydroxy-1-propenyl)-4-(4-methoxyphenyl)-6-methyl-2-(3,4-
methylenedioxyphenyl)pyridine was dissolved in toluene, treated with
Bu3SnN3, and refluxed overnight to give 60.5% the title
4-phenyl-3-tetrazolylpyridine compound (II). II in vitro inhibited the
binding of [125I] endotoxin to a pig ventricular muscle membrane preparation
with a -pIC50 value of 8.1.
ICM C07D-0213/80
ICS A61K-0031/44; A61K-0031/47; A61K-0031/505; A61K-0031/535;
     C07D-0405/04; C07D-0405/12; C07D-0405/14; C07D-0409/14; C07D-0413/14;
     C07D-0417/14
28-10 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1
Antiarteriosclerotics
Antidiabetic agents
  Antihypertensives
Antiulcer agents
Multiple organ failure
Multiple organ failure
   (preparation of phenylpyridine derivs. as endothelin antagonists for
   treatment endothelin-related diseases)
203801-21-2P
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203802-37-3P
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                                                            203802-41-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
use); BIOL (Biological study); PREP (Preparation); USES (Uses)
   (preparation of phenylpyridine derivs. as endothelin antagonists for
   treatment endothelin-related diseases)
203801-78-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
use); BIOL (Biological study); PREP (Preparation); USES (Uses)
   (preparation of phenylpyridine derivs. as endothelin antagonists for
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TC

CC

ΙT

IT

IT

treatment endothelin-related diseases)

RN 203801-78-9 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[6-(1,3-benzodioxol-5-yloxy)-4-(4-methoxyphenyl)-2-methyl-5-(1H-tetrazol-5-yl)-3-pyridinyl]-2-propenyl ester (9CI) (CA INDEX NAME)

L28 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:740226 HCAPLUS

DN 128:13259

TI Novel antidiabetic compounds having hypolipidemic, antihypertensive properties, process for their preparation and pharmaceutical compositions containing them

IN Lohray, Vidya Bhushan; Lohray, Braj Bhushan; Alla, Sekar Reddy; Ramanujam, Rajagopalan; Chakrabarti, Ranjan

PA Dr. Reddy's Research Foundation, India; Reddy-Cheminor, Inc.; Lohray, Vidya Bhushan; Lohray, Braj Bhushan; Alla, Sekar Reddy; Ramanujam, Rajagopalan; Chakrabarti, Ranjan

SO PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DT Patent

LA English FAN.CNT 1

APPLICATION NO. PATENT NO. KIND DATE DATE ------1997WO-US07417 19970502 <--PT WO---9741119 A1 19971106 W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU---9729307 19971119 1997AU-0029307 19970502 <--**A1** EP----981526 A1 20000301 1997EP-0923526 19970502 <--EP----981526 B1 20040225 R: CH, DE, FR, GB, LI, SE JP2001518069 **T**2 20011009 1997JP-0539253 19970502 <--PRAI 1997WO-US07417 W 19970502 <-os CASREACT 128:13259; MARPAT 128:13259 GI

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AB
    New thiazolidine-2,4-dione derivs. I (A = substituted or unsubstituted,
     single or fused, aromatic group or substituted or unsubstituted, single or
     fused, heterocyclic group with 1 or more hetero atoms selected from N, O,
     S; W = O, S, NR2 where R2 = H or lower alkyl group; Q = heteroatom of O, S
     or NR3 group where R3 = H or lower alkyl or lower alkoxy group; B and D =
     substituted or unsubstituted hydrocarbon linking group between N and X
     which may be saturated or may contain 1 or more double bonds; X = CH2 or
     hetero atom of N, S or O; Ar = optionally substituted divalent single or
     fused aromatic or optionally substituted single or fused heterocyclic group;
     R1 = H, OH, alkoxy, halo or lower alkyl group or forms a bond together
     with adjacent group Y; Y = = N or CR6 group where R6 = H, OH, alkoxy, halo
     or lower alkyl group or R2 forms a bond together with R1; Z = O or S when
     Y = CR2 ad Z = O when Y = N; m = 1-4; n = 0-4) their tautomeric forms,
     their derivs., their stereoisomers, their polymorphs, their pharmaceutical
     acceptable salts, their pharmaceutically acceptable solvates and
     pharmaceutically acceptable compns. containing them are claimed. Methods for
     their preparation and their use as antidiabetic compds. are claimed.
TC
     ICM C07D-0417/12
     ICS C07D-0211/46; C07D-0211/22; A61K-0031/425
CC
     28-7 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1
IT
    Antidiabetic agents
      Antihypertensives
     Hypolipemic agents
        (preparation of thiazolidine-2,4-dione derivs. as)
TΤ
     199103-09-8P
                    199103-11-2P
                                   199103-13-4P
                                                  199103-14-5P
                                                                 199103-15-6P
     199103-16-7P
                    199103-18-9P
                                   199103-28-1P
                                                  199103-29-2P
     199103-30-5P 199103-31-6P 199103-32-7P
     199103-33-8P 199103-34-9P 199103-35-0P
     199103-36-1P
                    199103-37-2P
                                   199103-38-3P
                                                  199103-39-4P
     199103-40-7P 199103-79-2P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (preparation of thiazolidine-2,4-dione derivs. as antidiabetic and
        antihypertensives and hypolipemic agents)
IT
     199103-30-5P 199103-31-6P 199103-32-7P
     199103-33-8P 199103-34-9P 199103-35-0P
     199103-36-1P 199103-79-2P
    RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (preparation of thiazolidine-2,4-dione derivs. as antidiabetic and
        antihypertensives and hypolipemic agents)
     199103-30-5 HCAPLUS
RN
CN
     4-Morpholinecarboxylic acid, 3-[[4-[(2,4-dioxo-5-
    thiazolidinylidene)methyl]phenoxy]methyl]-, phenylmethyl ester, (S)- (9CI)
       (CA INDEX NAME)
```

Absolute stereochemistry.

Double bond geometry unknown.

Absolute stereochemistry.

Double bond geometry unknown.

RN 199103-32-7 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-, phenylmethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 199103-33-8 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-, phenylmethyl ester, (3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 199103-34-9 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenoxy]methyl]-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 199103-35-0 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[4-[(2,4-dioxo-5-thiazolidinylidene)methyl]phenoxy]methyl]-, phenylmethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 199103-36-1 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-, phenylmethyl ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 199103-79-2 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[4-[(2,4-dioxo-5-thiazolidinyl)methyl]phenoxy]methyl]-, phenylmethyl ester, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:421294 HCAPLUS

DN 127:34005

TI Novel sulfamate compounds containing an N-substituted carbamoyl group, useful as CNS drugs, and method for preparing them

IN Choi, Yong Moon; Han, Dong Il; Kim, Hyung Cheol

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Yukong Limited, S. Korea
PA
SO
     PCT Int. Appl., 146 pp.
     CODEN: PIXXD2
DT
     Patent
     English
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FAN.CNT 3
     PATENT NO.
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                                           APPLICATION NO.
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GI
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$$\text{Ar-} \begin{array}{c} \text{OSO}_2\text{NR}^3\text{R4} \\ \\ \text{OCONR}^1\text{R2} \end{array} \quad \text{I}$$

Novel sulfamate compds. containing an N-substituted carbamoyl group are AB disclosed, specifically I [Ar = (un) substituted Ph; R1, R2, R3, R4 = H, alkyl, cycloalkyl, aryl; or NR1R2 and/or NR3R4 may form 3- to 7-membered aliphatic cyclic structure(s) with another N or O atom], including both their racemates and (R) - and (S) -optical isomers. I are useful for the prophylaxis and treatment of disorders of the central nervous system, especially nervous myalgia, epilepsy, and minimal brain dysfunction (no data). For instance, reaction of AcoCH2CHPhCH2OH with carbonyldiimidazole in CH2Cl2 and then with aqueous NH3 gave 95% AcOCH2CHPhCH2OCONH2. This compound was deacetylated with KCN in MeOH (88%), and the resultant alc. was sulfamoylated with ClSO2NH2 in pyridine (85%), to give title compound H2NSO2OCH2CHPhCH2OCONH2. A variety of substituted I, including (R) - and (S)-isomers, were prepared by this and other methods. ICM C07C-0307/02 IC

ICS A61K-0031/27

25-21 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds) CC Section cross-reference(s): 1

IT Anticonvulsants

Nervous system agents

(preparation of phenylpropanediol carbamate sulfamate compds. as CNS agents) IT 25451-53-0P 171433-01-5P 171433-04-8P 178759-04-1P 178759-44-9P 190589-96-9P 190589-97-0P 190589-98-1P 190589-99-2P 190589-95-8P 190590-03-5P 190590-01-3P 190590-00-2P 190590-04-6P 190590-05-7P 190590-06-8P 190590-07-9P 190590-08-0P 190590-16-0P 190590-17-1P 190590-19-3P 190590-20-6P 190590-21-7P 190590-22-8P 190590-23-9P 190590-24-0P 190590-25-1P 190590-26-2P 190590-27-3P 190590-28-4P 190590-29-5P 190590-38-6P 190590-30-8P 190590-39-7P 190590-47-7P 190590-48-8P 190590-50-2P 190590-51-3P 190590-52-4P 190590-49-9P 190590-55-7P 190590-56-8P 190590-54-6P 190590-53-5P 190590-57-9P 190590-58-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of phenylpropanediol carbamate sulfamate compds. as CNS agents) ΙT 190590-09-1P 190590-10-4P 190590-11-5P 190590-12-6P 190590-13-7P 190590-18-2P 190590-14-8P 190590-15-9P 190590-31-9P 190590-32-0P 190590-33-1P 190590-34-2P 190590-35-3P 190590-37-5P 190590-41-1P 190590-42-2P 190590-36-4P 190590-43-3P 190590-44-4P 190590-45-5P 190590-46-6P 190590-59-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of phenylpropanediol carbamate sulfamate compds. as CNS agents) ΙT 190590-00-2P 190590-07-9P 190590-23-9P 190590-29-5P 190590-51-3P 190590-57-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of phenylpropanediol carbamate sulfamate compds. as CNS agents)

4-Morpholinecarboxylic acid, 3-(acetyloxy)-2-phenylpropyl ester (9CI) (CA

190590-00-2 HCAPLUS

INDEX NAME)

RN

CN

RN 190590-07-9 HCAPLUS
CN 4-Morpholinecarboxylic acid, 3-hydroxy-2-phenylpropyl ester (9CI) (CA INDEX NAME)

RN 190590-23-9 HCAPLUS
CN 4-Morpholinecarboxylic acid, (2S)-3-(acetyloxy)-2-phenylpropyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 190590-29-5 HCAPLUS
CN 4-Morpholinecarboxylic acid, (2S)-3-hydroxy-2-phenylpropyl ester (9CI)
(CA INDEX NAME)

RN 190590-51-3 HCAPLUS

CN 4-Morpholinecarboxylic acid, (2R)-3-(acetyloxy)-2-phenylpropyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 190590-57-9 HCAPLUS

CN 4-Morpholinecarboxylic acid, (2R)-3-hydroxy-2-phenylpropyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

IT 190590-14-8P 190590-36-4P 190590-46-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of phenylpropanediol carbamate sulfamate compds. as CNS agents) 190590-14-8 HCAPLUS

RN 190590-36-4 HCAPLUS

CN 4-Morpholinecarboxylic acid, (2R)-3-[(aminosulfonyl)oxy]-2-phenylpropyl
ester (9CI) (CA INDEX NAME)

190590-46-6 HCAPLUS RN

CN 4-Morpholinecarboxylic acid, (2S)-3-[(aminosulfonyl)oxy]-2-phenylpropyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

1997:307688 HCAPLUS AN

DN 126:277402

TI New 4-aryl-3-aralkoxypiperidines and -azabicylooctanes for treating heart

and kidney insufficiency Binggeli, Alfred; Breu, Volker; Bur, Daniel; Fischli, Walter; Gueller, IN Rolf; Hirth, Georges; Maerki, Hans-Peter; Mueller, Marcel; Oefner, Christian; Stadler, Heinz; Vieira, Eric; Wilhelm, Maurice; Wostl, Wolfgang PA

F. Hoffmann-La Roche Ag, Switz. PCT Int. Appl., 492 pp. so

CODEN: PIXXD2

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GI
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AB New piperidine and azabicyclooctane derivs. (> 1000 compds.) are renin inhibitors for treatment of high blood pressure, heart and kidney insufficiency. Thus, the piperidine derivative I was prepared from 1-benzyl-3-propyl-4-piperidinone by reaction with 4-FC6H4Br, followed by 1-benzyloxy-3-chloromethylnaphthalene and deblocking. I had a renin-inhibiting IC50 of 0.317 μM.

IC ICM C07D-0211/42

ICS C07D-0401/12; C07D-0401/04; C07D-0401/06; A61K-0031/445

CC 27-16 (Heterocyclic Compounds (One Hetero Atom))

I

Section cross-reference(s): 1, 7

IT Antihypertensives

TΤ

(preparation of piperidine and azabicyclooctane derivs. as renin inhibitors) 188863-51-6P 188863-52-7P 188863-53-8P 188863-54-9P 188863-55-0P 188863-58-3P 188863-56-1P 188863-57-2P 188863-59-4P 188863-60-7P 188863-65-2P 188863-61-8P 188863-62-9P 188863-64-1P 188863-66-3P 188863-75-4P 188863-73-2P 188863-74-3P 188863-76-5P 188863-77-6P 188863-78-7P 188863-79-8P 188863-80-1P 188863-81-2P 188863-84-5P 188863-86-7P 188863-85-6P 188863-87-8P 188863-88-9P 188863-89-0P 188863-90-3P 188863-93-6P 188863-91-4P 188863-92-5P 188863-95-8P 188863-97-0P 188863-99-2P 188864-20-2P 188864-21-3P 188864-22-4P 188864-23-5P 188864-24-6P 188864-25-7P 188864-27-9P 188864-28-0P 188864-29-1P 188864-30-4P 188864-31-5P 188864-32-6P 188864-33-7P 188864-34-8P 188864-35-9P 188864-36-0P 188864-37-1P 188864-38-2P 188864-39-3P 188864-40-6P 188864-41-7P 188864-42-8P 188864-43-9P 188864-44-0P 188864-45-1P 188864-46-2P 188864-48-4P 188864-50-8P 188864-52-0P 188864-53-1P 188864-55-3P 188864-56-4P 188864-59-7P 188864-63-3P 188864-65-5P 188864-67-7P 188864-68-8P 188864-69-9P 188864-70-2P 188864-72-4P 188864-74-6P 188864-85-9P 188864-87-1P 188864-90-6P 188864-92-8P 188865-00-1P 188864-95-1P 188864-98-4P 188865-03-4P 188865-05-6P 188865-07-8P 188865-09-0P 188865-10-3P 188865-11-4P 188865-12-5P 188865-13-6P 188865-15-8P 188865-14-7P 188865-16-9P 188865-44-3P 188865-45-4P 188865-46-5P 188865-48-7P 188865-53-4P 188865-59-0P 188865-50-1P 188865-55-6P 188865-57-8P 188865-61-4P 188865-63-6P 188865-65-8P 188865-67-0P 188865-69-2P 188865-71-6P 188865-73-8P 188865-76-1P 188865-77-2P 188865-80-7P 188865-83-0P 188865-88-5P 188865-93-2P 188865-89-6P 188865-92-1P 188865-94-3P 188865-99-8P 188866-01-5P 188866-03-7P 188866-06-0P 188866-08-2P 188866-12-8P 188866-16-2P 188866-21-9P 188866-26-4P 188866-28-6P 188866-29-7P 188866-30-0P 188866-31-1P 188866-32-2P 188866-33-3P 188866-34-4P 188866-40-2P 188866-41-3P

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   (preparation of piperidine and azabicyclooctane derivs. as renin inhibitors)
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IT

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     188869-69-4P
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL
     (Biological study); PREP (Preparation); USES (Uses)
        (preparation of piperidine and azabicyclooctane derivs. as renin inhibitors)
IT
     188866-41-3P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of piperidine and azabicyclooctane derivs. as renin inhibitors)
     188866-41-3 HCAPLUS
RN
     4-Morpholinecarboxylic acid, 2-[4-[(3R,4R)-3-(2-naphthalenylmethoxy)-1-
CN
     [(2,2,2-trichloroethoxy)carbonyl]-4-piperidinyl]phenoxy]ethyl ester, rel-
     (9CI) (CA INDEX NAME)
```

Relative stereochemistry.

IT 188866-37-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of piperidine and azabicyclooctane derivs. as renin inhibitors) 188866-37-7 HCAPLUS

RN 188866-37-7 HCAPLUS
CN 4-Morpholinecarboxylic acid, 2-[4-[(3R,4R)-3-(2-naphthalenylmethoxy)-4piperidinyl]phenoxy]ethyl ester, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

```
L28 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:102093 HCAPLUS

DN 126:181346

TI Pyrazoloquinolines for antitumor agents, and preparation thereof

IN Wolin, Ronald L.; Afonso, Adriano

PA USA

SO U.S., 14 pp.

CODEN: USXXAM
```

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DT
    Patent
    English
LA
FAN.CNT 1
    PATENT NO.
                                         APPLICATION NO.
                       KIND
                              DATE
                                                               DATE
                                          -----
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                              -----
                                                                -----
PΙ
    US---5597821
                              19970128
                                         1994US-0356826
                                                               19941215 <--
                        Α
PRAI 1994US-0356826
                              19941215 <--
os
    MARPAT 126:181346
GI
```

Pyrazoloquinolines (Markush included) are disclosed which are useful as AB antitumor agents. Preparation of compds. of the invention is described, as are inhibitory activities in a Ras p21 assay. The most preferred compound of the invention is I, which has an IC50 of 5 μM in the Ras p21 assay and good chemical stability.

Ι

ICM A61K-0031/535 ICS C07D-0487/04 IC

INCL 514232800

CC 1-6 (Pharmacology)

Section cross-reference(s): 28

TT Antitumor agents

(pyrazologuinolines for antitumor agents, and preparation thereof) IT 175543-51-8 175543-52-9 175543-53-0 175543-54-1 175543-79-0 175543-80-3 175543-85-8 175543-82-5 175543-84-7 175543-86-9 187473-18-3 187473-19-4 187473-20-7 187473-21-8 187473-22-9 187473-24-1 187473-23-0 187473-25-2 187473-26-3 187473-27-4 187473-28-5 187473-29-6 187473-30-9 187473-31-0 187473-32-1 187473-33-2 187473-34-3 187473-35-4 187473-36-5 187473-37-6 187473-38-7 187473-40-1 187473-42-3 187473-39-8 187473-41-2 187473-43-4 187473-44-5 187473-45-6 187473-46-7 187473-48-9 187473-49-0 187473-50-3 187473-51-4 187473-54-7 187473-55-8 187473-52-5 187473-53-6 187473-57-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pyrazoloquinolines for antitumor agents, and preparation thereof) 187473-50-3 187473-51-4 187473-52-5

IT 187473-53-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pyrazoloquinolines for antitumor agents, and preparation thereof)

RN 187473-50-3 HCAPLUS

4-Morpholinecarboxylic acid, 2-(4-chloro-6-methoxy-3-methyl-1H-CN pyrazolo[3,4-b]quinolin-1-yl)-6-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]me thyl]-, phenylmethyl ester, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187473-51-4 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-(4-chloro-6-methoxy-3-methyl-1H-pyrazolo[3,4-b]quinolin-1-yl)-6-(hydroxymethyl)-, phenylmethyl ester, (2R-cis)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 187473-52-5 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-(4-chloro-6-methoxy-3-methyl-1H-pyrazolo[3,4-b]quinolin-1-yl)-6-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-, ethyl ester, (2R-cis)- (9CI) (CA INDEX NAME)

RN187473-53-6 HCAPLUS CN 4-Morpholinecarboxylic acid, 2-(4-chloro-6-methoxy-3-methyl-1Hpyrazolo[3,4-b]quinolin-1-yl)-6-(hydroxymethyl)-, ethyl ester, (2R-cis)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:605524 HCAPLUS

DN 125:248474

TI Preparation of O-carbamoyl-D-phenylalaninol CNS agents

IN Choi, Yong Moon; Han, Dong Il; Kim, Yong Kil

Yukong Limited, S. Korea PA

SO PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DT Patent

LΑ English

GΙ

FAN.CNT 2					
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ΡI	WO9624577	A1	19960815	1996WO-KR00018	19960208 <
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	RW: AT, BE, CH	DE, DK	C, ES, FR, C	GB, GR, IE, IT, LU, MC,	NL, PT, SE
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	CA2212326	AA	19960815	1996CA-2212326	19960208 <
	EP815074	A1	19980107	1996EP-0901562	19960208 <
	EP815074	B1	20011004		
	R: BE, CH, DE,	DK, ES	FR, GB, C	GR, IT, LI, NL, SE, PT,	IE
	CN1173863	A	19980218	1996CN-0191875	19960208 <
	CN1070846	В	20010912		
	JP11501617	T2	19990209	1996JP-0524155	19960208 <
	ES2165485	TЗ	20020316	1996ES-0901562	19960208 <
	PT815074	T	20020328	1996PT-0901562	19960208 <
PRAI	1995KR-0002543	A	19950211	<	
	1996WO-KR00018	W	19960208	<	
os	MARPAT 125:248474				

AB 800-carbamoyl-(D)-phenylalaninols [I; R1, R2 = H, C1-8 alkyl,

(un) substituted cycloaliph. heterocyclyl; the number of C atoms in both R1 and R2 is 0-16], useful as CNS agents (no data) in the treatment of depression (no data), anxiety (no data), epilepsy (no data), etc. (no data), are prepared by the reaction of D-phenylalaninol with benzyl chloroformate, followed by carbamoylation of the protected aminoalc. with phosgene, followed by amidation of the carbonate chloride with amines R1(R2)NH. Thus, N-benzyloxycarbonyl-D-phenylalaninol was carbamoylated with phosgene and the intermediate amidated with H2NMe, producing I (R1 = H, R2 = Me) in 78% yield. ICM C07C-0271/12 ICS C07C-0269/04; C07C-0295/205 34-2 (Amino Acids, Peptides, and Proteins) Section cross-reference(s): 28 Analgesics Anticonvulsants and Antiepileptics Antidepressants Anxiolytics Nervous system agents (O-carbamoyl-D-phenylalaninols) 181797-75-1P 181797-77-3P 181797-78-4P 181797-79-5P 181797-82-0P 181797-84-2P 181797-87-5P 181797-89-7P 181797-91-1P 181797-96-6P 181797-95-5P 181797-92-2P 181797-93-3P 181797-94-4P 181797-97-7P 181797-98-8P 181797-99-9P 181798-00-5P

181797-84-2P 181797-87-5P 181797-89-7P 181797-91-1P
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181798-14-1P
PL: SPN (Symphotic propagation): THU (Therepoutic use): PIOL

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of O-carbamoyl-D-phenylalaninol CNS agents) 181797-89-7P 181797-99-9P 181798-10-7P

181797-89-7 HCAPLUS

CN 4-Morpholinecarboxylic acid, (2R)-3-phenyl-2-[[(phenylmethoxy)carbonyl]ami no]propyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IC

CC

TТ

IT

TΤ

RN 181797-99-9 HCAPLUS

CN 4-Morpholinecarboxylic acid, (2R)-2-amino-3-phenylpropyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 181798-10-7 HCAPLUS

4-Morpholinecarboxylic acid, 2-amino-3-phenylpropyl ester, (R)- (9CI) (CA CN INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1996:241879 HCAPLUS

DN 125:157770

TI Amino Diol HIV Protease Inhibitors. Synthesis And Structure-Activity Relationships Of P1/P1' Compounds: Correlation between Lipophilicity and Cytotoxicity

Chen, Ping; Cheng, Peter T. W.; Alam, Masud; Beyer, Barbara D.; Bisacchi, ΑIJ Gregory S.; Dejneka, Tamara; Evans, Adelaide J.; Greytok, Jill A.; Hermsmeier, Mark A.; et al.

Bristol-Myers Squibb Pharmaceutical Research Institute, Princeton, NJ, CS 08543-4000, USA

so Journal of Medicinal Chemistry (1996), 39(10), 1991-2007 CODEN: JMCMAR; ISSN: 0022-2623

PΒ American Chemical Society

Journal DT

LΑ English

GI

AB A series of novel amino diol inhibitors of HIV protease based on an amino diol (I) with structural modifications were prepared in order to reduce the cytotoxicity of I. The authors observed a high degree of correlation between the lipophilicity and the cytotoxicity of this series of inhibitors. Appropriate substitution at the para position of the Ph group of I resulted in the identification of equipotent (both against the enzyme and in cell culture) compds. which had significantly decreased cytotoxicity.

CC 1-3 (Pharmacology)

```
Section cross-reference(s): 34
ΙT
    Lipophilicity
       Neoplasm inhibitors
        (preparation of amino diol HIV-protease inhibitors and correlation between
        lipophilicity and cytotoxicity)
     161302-38-1DP, derivs.
IT
                                             162538-18-3P
                                                             162538-24-1P
                              161302-40-5P
     162538-25-2P
                    162539-54-0P
                                   162539-57-3P
                                                   162539-80-2P
                                                                  162539-95-9P
                                                   162540-90-1P
     162540-49-0P
                    162540-61-6P
                                   162540-84-3P
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     162540-97-8P
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                                   162541-04-0P
                                                   162541-14-2P
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     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PRP (Properties); SPN (Synthetic preparation);
     THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (preparation of amino diol HIV-protease inhibitors and correlation between
        lipophilicity and cytotoxicity)
IT
     1615-14-1P, 1H-Imidazole-1-ethanol
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     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation of amino diol HIV-protease inhibitors and correlation between
        lipophilicity and cytotoxicity)
TT
     175233-61-1P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); PRP (Properties); SPN (Synthetic preparation);
     THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (preparation of amino diol HIV-protease inhibitors and correlation between
        lipophilicity and cytotoxicity)
RN
     175233-61-1 HCAPLUS
     4-Morpholinecarboxylic acid, [4-[(2S,3R)-2-[[(1,1-
CN
     dimethylethoxy) carbonyl] amino] -4-[[(2R,3S)-3-[[(1,1-
     dimethylethoxy) carbonyl] amino] -2-hydroxy-4-phenylbutyl] amino] -3-
     hydroxybutyl]phenyl]methyl ester (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN

CN

175233-84-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of amino diol HIV-protease inhibitors and correlation between lipophilicity and cytotoxicity)
175233-84-8 HCAPLUS
4-Morpholinecarboxylic acid, [2-[2-[[(1,1-dimethylethoxy)carbonyl]amino]-2-

oxiranylethyl]phenyl]methyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME) Absolute stereochemistry.

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L28
    ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
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ΑN 1996:71587 HCAPLUS

DN 124:175686

ΤI Carbamates of rapamycin

IN Kao, Wenling; Abou-Gharbia, Magid A.; Vogel, Robert L.

American Home Products Corporation, USA PA

so U.S., 16 pp. Cont.-in-part of U.S. Ser. No. 160,984, abandoned. CODEN: USXXAM

DTPatent

English LA

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	US5480989	Α	19960102	1994US-0297663	19940901 <
	US5302584	A	19940412	1993US-0054655	19930423 <
	US5530007	Α	19960625	1995US-0402590	19950313 <
	US5559120	A	19960924	1995US-0402571	19950313 <
	US5508399	Α	19960416	1995US-0450835	19950525 <
	US5530121	A	19960625	1995US-0451104	19950525 <
PRAI	1992US-0960597	B2	19921013	<	
	1993US-0054655	A3	19930423	<	
	1993US-0160984	B2	19931201	<	
	1994US-0297663	A 3	19940901	<	
os	MARPAT 124:175686				

ΔR Rapamycin 42-carbamates with aminoalkanes and nitrogen heterocycles (>50 compds.) were prepared as immunosuppressants. Thus, rapamycin was esterified by ClCO2C6H4(NO2)-4 and this carbonate amidated with N, N-diethylenediamine to give rapamycin 42-(2diethylaminoethyl)carbamate (I). I.HCl salt was evaluated for immunosuppressive activity in in vivo pinch skin graft and showed a survival time of 13.6 days at 4 mg/kg vs. controls which were 6-7 days.

IC ICM C07D-0491/06

ICS A61K-0031/395

INCL 540456000

26-6 (Biomolecules and Their Synthetic Analogs)

Section cross-reference(s): 1

TΤ 156598-81-1P 156598-85-5P 156598-86-6P 156598-87-7P 156598-82-2P 165124-23-2P 173553-99-6P 173554-00-2P 173554-02-4P 173554-03-5P 173554-04-6P 173554-05-7P 173554-06-8P 173554-07-9P 173554-08-0P 173554-09-1P 173554-10-4P 173554-11-5P 173554-12-6P 173554-13-7P 173554-14-8P 173554-15-9P 173554-17-1P 173554-18-2P 173554-21-7P 173554-22-8P 173554-23-9P 173554-24-0P 173554-25-1P 173554-26-2P 173554-27-3P 173554-28-4P 173554-29-5P 173554-30-8P 173554-32-0P 173658-46-3P 173658-47-4P 173554-31-9P 173554-38-6P

173827-85-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of immunosuppressant carbamates of rapamycin) 102-83-0, N,N-Dibutyl-1,3-100-36-7, N, N-Diethylethylenediamine IT propanediamine 103-76-4, 1-Piperazineethanol 108-00-9. N, N-Dimethylethylenediamine 109-01-3 109-55-7, 3-Dimethylaminopropylamine 110-85-0, Piperazine, reactions 123-00-2, 4-(3-Aminopropyl)morpholine Morpholine, reactions 2038-03-1, 4-(2-Aminoethyl)morpholine 2213-43-6, 1-Aminopiperidine 4403-71-8, 4-Aminobenzylamine 4572-03-6, 1(3-Aminopropyl)-4-methylpiperazine 5317-32-8, 1-(3-Hydroxypropyl)piperazine 7693-46-1, 4-Nitrophenyl chloroformate 26116-12-1, 2-(Aminomethyl)-1-ethylpyrrolidine 53123-88-9, Rapamycin 58226-19-0 116183-82-5 128345-57-3 RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of immunosuppressant carbamates of rapamycin) ΙT 173554-28-4P RL: BAC (Biological activity or effector, except adverse); BSU (Biological

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of immunosuppressant carbamates of rapamycin)

RN 173554-28-4 HCAPLUS

CN Rapamycin, 42-[[2-[(4-morpholinylcarbonyl)oxy]ethyl]carbamate] (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

IT 53123-88-9, Rapamycin

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of immunosuppressant carbamates of rapamycin)

RN 53123-88-9 HCAPLUS

CN Rapamycin (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

PAGE 1-A

PAGE 2-A \ Me

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L28 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     1995:975347 HCAPLUS
DN
     124:9320
ΤI
     Preparation of steroidal glycosides as hypocholesterolemic agents and
     antiatherosclerosis agents
IN
     Deninno, Michael Paul
PA
     Pfizer Inc., USA
so
     PCT Int. Appl., 93 pp.
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
FAN.CNT 1
     PATENT NO.
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                                  DATE
                                              APPLICATION NO.
                                                                       DATE
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                                              1996US-0652477
                                                                       19960619 <--
PRAI 1993US-0174100
                           Α
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OS GI

AB The title compds. [I; Q1 = CO, CH2, (R)- or (S)-CH(OH); R1 - R3 = H, OH, halo, NH2, N3, C1-6 alkoxy-C1-6 alkoxy, Z-R4; wherein NHCO, O2C, CO2, NR5, NHCONR5, OCSNR5; R4 = each (un) substituted aryl, aryl-C1-6 alkyl, C2-4 alkenyl, C1-6 alkyl, C3-7 cycloalkyl, or C3-7 cycloalkyl-C1-6 alkyl; wherein R5 = H, C1-4 alkyl; NR5 and R4 which is a covalent bond are taken together to form pyrrolidinyl, piperidinyl, N-methylpiperazinyl, indolinyl, or morpholinyl each optionally substituted on the C atom with C1-4 alkoxycarbonyl], useful for the treatment of hypercholesterolemia and atherosclerosis (no data), are prepared Thus, $(3\beta, 5\alpha, 25R)$ -3-[[4''-(2-fluorophenylcarbamoyl)-6''-tert-butyldimethylsilyl-2',2'',3',3'',6'-pentaacetyl-β-D-cellobiosyl]oxy]spirostan-12-one was stirred with KCN in MeOH for deacylation and treated with Bu4NF in THF at fluorophenylcarbamoyl)- β -D-cellobiosyl]oxy]spirostan-12-one. IC ICM C07J-0071/00

ICS A61K-0031/58

IT

CC 33-4 (Carbohydrates)

Section cross-reference(s): 1

IT Antiarteriosclerotics

(antiatherosclerotics, preparation of steroidal glycosides as hypocholesterolemic agents and antiatherosclerotic agents)

171267-35-9P 171267-31-5P 171267-32-6P 171267-33-7P 171267-34-8P 171267-38-2P 171267-39-3P 171267-40-6P 171267-36-0P 171267-37-1P 171267-44-0P 171267-41-7P 171267-42-8P 171267-43-9P 171267-45-1P 171267-50-8P 171267-49-5P 171267-46-2P 171267-47-3P 171267-48-4P 171267-53-1P 171267-52-0P 171267-54-2P 171267-55-3P 171267-51-9P 171267-56-4P 171267-59-7P 171267-60-0P 171267-57-5P 171267-58-6P 171267-61-1P 171267-62-2P 171267-63-3P 171267-64-4P 171267-65-5P 171267-66-6P 171267-67-7P 171267-68-8P 171267-69-9P 171267-70-2P 171267-75-7P 171267-71-3P 171267-72-4P 171267-73-5P 171267-74-6P 171267-79-1P 171267-80-4P 171267-76-8P 171267-77-9P 171267-78-0P 171267-84-8P 171267-85-9P 171267-81-5P 171267-82-6P 171267-83-7P 171267-90-6P 171267-86-0P 171267-87-1P 171267-88-2P 171267-89-3P 171267-93-9P 171267-94-0P 171267-95-1P 171267-92-8P 171267-91**-**7P 171267-97-3P 171267-98-4P 171267-99-5P 171268-00-1P 171267-96-2P 171268-03-4P 171268-05-6P 171268-01-2P 171268-02-3P 171268-04-5P 171268-06-7P 171268-07-8P 171268-08-9P 171268-09-0P 171268-12-5P 171268-13-6P 171268-14-7P 171268-10-3P 171268-11-4P

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171268-40-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
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study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of steroidal glycosides as hypocholesterolemic agents and antiatherosclerotic agents)

IT 171268-07-8P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of steroidal glycosides as hypocholesterolemic agents and antiatherosclerotic agents)

RN 171268-07-8 HCAPLUS

CN Spirostan-12-one, 3-[[6-O-(4-morpholinylcarbonyl)-4-O-[6-O-(4-morpholinylcarbonyl)- β -D-glucopyranosyl]- β -D-glucopyranosyl]oxy]-, (3 β ,5 α ,25R)- (9CI) (CA INDEX NAME)

PAGE 1-B

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L28 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     1995:784968 HCAPLUS
DN
     123:208783
TI
     Improvement of antibody-directed enzyme prodrug therapy (ADEPT)
IN
     Smith, Gary Keith; Blumenkopf, Todd Andrew; Cory, Michael
PA
     Wellcome Foundation Ltd., UK
so
     PCT Int. Appl., 247 pp.
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
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                                 DATE
                                             APPLICATION NO.
                                                                     DATE
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             MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA,
             US, UZ
         RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU,
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     MARPAT 123:208783
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AB The present invention relates to improvements in targetted enzyme prodrug therapy including antibody-directed enzyme prodrug therapy (ADEPT); it particularly relates to novel enzymes and prodrugs for use in ADEPT. Enzymes are targetted to specific tissues; prodrugs located at the site are converted into cytotoxic products. Thus, a single conjugate could generate a proportionately larger amount of cytotoxic drug at the target site (by repeated rounds of enzymatic catalysis of prodrug activation) than would occur in targetting of the prodrug itself. The enzyme used

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should be a mutant capable of catalyzing the conversion of the prodrug
     into the active cytotoxin, and the prodrug should be refractory to
    endogenous catalysis by the wild-type form of the enzyme. Thus, the
    kcat/Km value with wild-type human carboxypeptidase A1 for
    N-(4-(((2,4-diamino-6-pteridinyl)methyl)methylamino)benzoyl)-L-glutam-1-yl-
     3tert-butyl-L-phenylalanine was not measurable, but with a mutant (268
    Thr-Gly) carboxypeptidase A1 the prodrug became an excellent
     substrate.
IC
    ICM A61K-0047/48
     ICS C12N-0009/64; C12N-0015/52; C12N-0015/63; C12N-0005/10
CC
     63-5 (Pharmaceuticals)
    Section cross-reference(s): 1, 3, 7, 28
IT
    Deoxyribonucleic acid sequences
    Genetic vectors
    Molecular cloning
      Neoplasm inhibitors
    Protein sequences
    Saccharomyces cerevisiae
        (improvement of antibody-directed enzyme prodrug therapy (ADEPT))
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    115-11-7, reactions 128-08-5, N-Bromosuccinimide
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    Cyclopentene 300-34-5, 3-Amino-L-tyrosine
                                                  300-39-0,
    3,5-Diiodo-L-tyrosine 540-88-5, tert-Butyl acetate 949-99-5,
    4-Nitro-L-phenylalanine 1075-38-3, 3-tert-Butyltoluene
                                                             1119-33-1
    1833-43-8 3886-08-6 5159-41-1, 2-Iodobenzyl alcohol
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    4-Nitrophthalic anhydride 6384-18-5, L-Aspartic acid dimethylester
    6456-74-2, Glycine-tert-butyl ester
                                         16450-41-2, L-Glutamic acid diethyl
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                                                             18162-48-6,
                                      18731-19-6 27784-76-5, tert-Butyl
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    diethylphosphonoacetate
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    hydroxybenzoic acid 67318-11-0, Ethyl 5-amino-2-thiophenecarboxylate
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        (improvement of antibody-directed enzyme prodrug therapy (ADEPT))
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     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (improvement of antibody-directed enzyme prodrug therapy (ADEPT))
TT
     148-82-3DP, Melphalan, derivs.
     RL: PEP (Physical, engineering or chemical process); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study);
     PREP (Preparation); PROC (Process); USES (Uses)
        (prodrugs; improvement of antibody-directed enzyme prodrug therapy
        (ADEPT))
IT
     100516-54-9
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (improvement of antibody-directed enzyme prodrug therapy (ADEPT))
RN
     100516-54-9 HCAPLUS
     4-Morpholinecarboxylic acid, 6-oxo-2,3-diphenyl-, phenylmethyl ester,
CN
     (2R,3S) - (9CI) (CA INDEX NAME)
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Absolute stereochemistry. Rotation (-).

RN 167549-70-4 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[[3-(methoxycarbonyl)phenyl]methyl]-2-oxo5,6-diphenyl-, phenylmethyl ester, [3S-(3α,5β,6β)]- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

RN 167549-81-7 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[(2-cyclopentylphenyl)methyl]-2-oxo-5,6diphenyl-, phenylmethyl ester, [3S-(3α,5β,6β)]- (9CI) (CA
INDEX NAME)

Absolute stereochemistry.

RN 167549-90-8 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[(3-cyclopentylphenyl)methyl]-2-oxo-5,6-diphenyl-, phenylmethyl ester, [3S-(3 α ,5 β ,6 β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 167550-07-4 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[[3-(1,1-dimethylethyl)phenyl]methyl]-2-oxo5,6-diphenyl-, 1,1-dimethylethyl ester, [3S-(3α,5β,6β)](9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 167550-48-3 HCAPLUS
CN 4-Morpholinecarboxylic acid, 2-oxo-5,6-diphenyl-3-[[3-

(trimethylsily1)phenyl]methyl]-, 1,1-dimethylethyl ester, $[3S-(3\alpha,5\beta,6\beta)]$ - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 167550-65-4 HCAPLUS
CN 4-Morpholinecarboxylic acid, 3-[[3-(1-ethylpropyl)phenyl]methyl]-2-oxo-5,6diphenyl-, 1,1-dimethylethyl ester, [3S-(3α,5β,6β)]- (9CI)

(CA INDEX NAME)

Absolute stereochemistry.

RN 167551-02-2 HCAPLUS

CN

4-Morpholinecarboxylic acid, 3-[[3-(1,1-dimethylethyl)-4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]phenyl]methyl]-2-oxo-5,6-diphenyl-,1,1-dimethylethyl ester, [3S-(3 α ,5 β ,6 β)]- (9CI) (CA INDEX NAME)

RN 167551-03-3 HCAPLUS

4-Morpholinecarboxylic acid, 3-[[3-(1,1-dimethylethyl)-4-CN hydroxyphenyl]methyl]-2-oxo-5,6-diphenyl-, 1,1-dimethylethyl ester, [3S-(3 α ,5 β ,6 β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 148-82-3DP, Melphalan, derivs.

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(prodrugs; improvement of antibody-directed enzyme prodrug therapy

(ADEPT))

148-82-3 HCAPLUS RN

L-Phenylalanine, 4-[bis(2-chloroethyl)amino]- (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

L28 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN AN 1995:780258 HCAPLUS

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                                                     Eur. Pat. Appl., 46 pp.
                                                                               OS
                                            F. Hoffmann-La Roche AG, Switz.
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                                                                Ramuz, Henri
      Georges; Loeffler, Bernd-Michael; Mueller, Marcel; Weidhart, Werner;
  Breu, Volker; Burri, Kaspar; Cassal, Hean-Marie; Clozel, Martine; Hirth,
                                                                               ΝI
        Preparation of sulfonylaminopyrimidines as endothelin antagonists.
                                                                               IT
                                                                  153:169647
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       (preparation of sulfonylaminopyrimidines as endothelin antagonists)
                                                               Antihypertenaives
                                                  Section cross-reference(s): 1
                    28-16 (Heterocyclic Compounds (More Than One Hetero Atom))
                                               CO1D-0330\25' YeTK-003T\202
   COLD-0402/14: COLD-0402/15: COLD-0403/14: COLD-0403/15: COLD-0413/15:
                                                               ICM COLD-0401/15
md/kd orajly in rata gave a 30% reduction in average arterial blood pressure.
      methoxyphenoxy) -2,2'-bipyrimidin-4-yloxy]ethyl ester. The latter at 30
                 carbaminic acid, 2-[6-(4-tert-butylphenylsulfonylamino)-5-(2-
             bipyrimidin-4-yl]benzenesulfonamide was added to give pyridine-2-
         bywe: φ-rerr-pnrλ1-η-[e-(S-μλqroxλerμoxλ)-2-(S-шerμoxλbμeuoxλ)-3'S.-
 = 1-3; n = 0,1), were prepared Thus, 2-pyridinecarbonyl azide was heated in
   arylcarbamoylalkyl, heterocyclyl, heterocyclylalkyl, etc.; Rll = H, RlO; m
            μλατοχγαίκγι, carboxγalkyl, alkoxγcarbonylalkyl, alkanoyloxyalkyl,
       etc.; R5-R9 = H, halo, CF3, alkyl, alkoxy, alkylthio; X = O, S, NH; Y = O2CNRIOR11, HNOCNRIOR11, O2COR10, HNCO2R10; R10 = alkyl, cycloalkyl, \frac{1}{2}
     slkyleulfonyl, aryl, arylthio, aryloxy, heterocyclyl, heterocyclylalkyl, alkyleulfinyl, arylthio, arylthio, arylthio, aryloxy, heterocyclylalkyl,
     isopropylidenedioxy; R4 = H, alkyl, cycloalkyl, CF3, alkoxy, alkynyloxy,
                R2R3, R5R6, R6R7 = butadienyl, methylenedioxy, ethylenedioxy,
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study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) 48-88-70749T 46-72-60749T ΤI (preparation of sulfonylaminopyrimidines as endothelin antagonists) use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonylaminopyrimidines as endothelin antagonists) RL: BAC (Biological activity or effector, except adverse); BSU (Biological

INDEX NAME)] smino] -5-(3-methoxyphenoxy) -4-pyrimidinyl] oxy] ethyl ester [9CI] \mathfrak{q} -Worpholinecarboxylic acid, 2-[[6-[[[4-(1,1-dimethylethyl)phenyl] sulfonyl CN Te1403-24-9 HCAPLUS ВИ

CHS_CHS_

(CY INDEX NAME) (ID6) methylpropyl)phenyl]sulfonyl]amino][2,2'-bipyrimidin]-4-yl]oxy]ethyl ester 4-Morpholinecarboxylic acid, 2-[[5-(2-methoxyphenoxy)-6-[[[4-(2-T67404-88-8 HCAPLUS ВИ

PAGE 1-A

ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

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DYCE S-Y

EI Satoat:SSI TAGRAM SO 19931026 69ZOTSO-OME66T М TSSSTST7 A EGIZGGO-SNZGGI T9921027 A PRAI 1992US-0966799 --> 9Z0IE66I 1993JP-0511259 T9960326 LS257502752 3P--08502752 E: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE Eb----08840 T9931026 <--T334Eb-030T502 9T80S66T IA --> 9ZOTE66T 2782246---UA 2782200-UA4661 79940524 IA 1993CA-2147129 CY---SI#1TS T993T026 <--TTS0766T AA CE, CI' CW' GF' GN' WP' WE' NE' SN' LD' LG BE, BJ, 'ຄວ ES' EK' GB' GK' IE' IL' TN' WC' NT' 5L' SE' DK' DE' 'HO BE' ,TA :WA נטא ко, br' 'xs 'ZN 'ON zn 'sn , AU 'as 'MW BE, BY, CA, CZ, FI, HU, JP, KR, KZ, LK, LV, MG, MM, M: YO' BB' BC' Ι¥ --> 9ZOTE66T 69ZOTSN-OME66T TTS0766T EPTOT#6---OM Ιđ ----PATENT NO. DYLE APPLICATION NO. DALE KIND FAM. CNT 1 guðjjap ΑıΙ Patent J.CI CODEN: DIXXDS PCT Int. Appl., 177 pp. OS Merck and Co., Inc., USA ٧ď Polo, Scott A.; Hagmann, William K. MacCose, Malcolm; Mills, Sander G.; Shah, Shrenik K.; Sahoo, Soumya P.; Doherty, James B.; Dorn, Conrad P.; Durette, Philippe L.; Finke, Paul E.; NI Substituted azetidinones as anti-inflammatory and antidegenerative agents IJ 122:160362 DΝ 1995:389590 HCAPLUS ИA

В

L28

FOT anti-inflammatory and antidegenerative agents, are described. been found to be potent elastase inhibitors and thereby useful as yexexocyclic xing; R7 = H, halo, alkyl, OH, alkoxy; n = 0-5], which haveBe = H' sikyl, sikoxysikyl; or RSR6 = atoms to form (un) saturated monocyclic piperidino, piperazino, (thio) morpholino, pyrrolidino, pyrrolo, imidazolo; alkoxyalkyl, various substituted alkyls; or NR4R5 = (un) substituted New substituted azetidinones I [R = alkyl; Rl = alkyl; R2, R3 = H, alkyl, hydroxyalkyl; haloalkyl, alkenyl, alkoxyalkyl; R2, R3 = H, alkyl, halo, CO2H, alkoxyalkyl; alkoxyalkyl; R2, R3 = H, alkyl, halo, CO2H, alkoxyalkyl; A2 = H, alkyl, alkoxyalkyl; R2 = H, alkyl, alkoxyalkyl; R2 = H, alkyl, alkoxyalkyl; R3 = H, alkyl, halo, alkyl, alkoxyalkyl; R3 = H, alkyl, alkyl, alkoxyalkyl; R3 = H, alkyl, alky

Absolute stereochemistry.

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  werphypeuhj)pnrhj]ewruo]csrpouhj]-4-0x0-5-szerjqiuhj]oxh]bueuhj]werphj]we
       4-Morpholinecarboxylic acid, 2-[[[4-[[(2S)-3,3-diethyl-1-[[[(1R)-1-(4-
                                                                                 СИ
                                                         Tets80-e3-3 HCFbrns
                                                                                 КИ
           (preparation of substituted azetidinones as antiinflammatories)
               use); BIOL (Biological study); PREP (Preparation); USES (Uses)
          study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
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                                                                  TeT580-03-35
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                                                                                 II
(leukemia, preparation of substituted azetidinones as elastase inhibitors)
                                                           Neoplasm inhibitors
          (preparation of substituted azetidinones as elastase inhibitors)
                                                         Neoplasm inhibitors
                                                       Inflammation inhibitors
                                                                                 LI
                                             Section cross-reference(s): 1, 7
                              26-5 (Biomolecules and Their Synthetic Analogs)
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               YEIK-003T/44: YEIK-003T/442: YEIK-003T/412: YEIK-003T/432
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                COAD-04T3\T4: COAD-04T1\TS: COAD-04T1\T4: YeTK-003T\392:
                COJD-0551/081; COJD-0403/15; COJD-0403/14; COJD-0413/15;
                                                             ICM C01D-0502/08
                                                                                 OT
                    described, with elastase inhibition data for most compds.
               vitro, with Kobs/[I] = 565,000 \text{ mol-l-sec-l.} Approx. 130 I are
      III inhibited the proteolytic activity of human neutrophil elastase in
     with Meochschsuhet and etan to give 55% II (R8 = Chruetchschsome) (III).
  (84%) to give II (R8 = CH2Br). Which underwent bromination by Br2 and PPh3 in THF to give II (R8 = CH2Br). The latter, without isolation, reacted
  3,3-diethyl-4-acetoxyazetidin-2-one given] underwent reduction by BH3.SMe2
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example, the azetidinone derivative II (R8 = CO2H) [preparation from racemic

PAGE 1-A

PAGE 1-B

__Me

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L28 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN
AN
     1995:308736 HCAPLUS
DN
     122:81384
TI
     Preparation of 2-(thio)morpholineacetates and analogs as GABAB antagonists
IN
     Kuo, Shen-Chun; Blythin, David J.; Kreutner, William
     Schering Corp., USA
PΑ
     PCT Int. Appl., 75 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
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                          KIND
                                  DATE
                                               APPLICATION NO.
                                                                       DATE
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     EP----690850
                           Bl
                                  19971112
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, NL, PT, SE
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     1994WO-US02803
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os
     MARPAT 122:81384
GT
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$$R^1$$
 R^2
 R^2

Title compds. [I; R = H, (cyclo)alkyl, alkanoyl, alkoxycarbonyl, AB phenylalkyl, etc.; R1 = (hydroxy)alkyl; R1 may = H with restrictions on R, X, and Y; R2,R3 = H, (hydroxy)alkyl; R1R2 = atoms to form a ring; X = O or S; Y = CO2H, alkoxycarbonyl, SO3H, P(O)(OH)2, 1H-tetrazol-5-yl, etc.] were prepared Thus, H2NCMe2CH2OH was N-alkylated by BrCH2CH:CHCO2Et and the product cyclized to give title compound II (R4 = Et) which was N-protected and subjected to enantiomer separation to give, after saponification and deprotection, (+)-II.HCl (R4 = H). The latter gave complete control of γ-butyrolactone-induced seizures in rats at 3.0mg/kg (route of administration not given). IC ICM C07D-0265/30 ICS C07D-0279/12; C07D-0265/34; C07F-0009/6533; A61K-0031/535; A61K-0031/54 28-13 (Heterocyclic Compounds (More Than One Hetero Atom)) Section cross-reference(s): 1 IT Anticonvulsants and Antiepileptics Nervous system agents (preparation of 2-(thio)morpholineacetates and analogs as GABAB antagonists) IT 160415-03-2P 160415-06-5P 160415-07-6P 160415-08-7P 160415-09-8P 160415-10-1P 160415-11-2P 160415-12-3P 160415-13-4P 160415-14-5P 160415-15-6P 160415-16-7P 160415-19-0P 160415-22-5P 160415-20-3P 160415-21-4P 160415-23-6P 160415-24-7P 160415-28-1P 160415-25-8P 160415-26-9P 160415-27-0P 160415-29-2P 160415-30-5P 160415-33-8P 160415-34-9P 160415-36-1P 160415-37-2P 160415-38-3P 160415-39-4P 160415-40-7P 160415-40-7P 160415-41-8P 160415-41-8P 160415-42-9P 160415-43-0P 160415-46-3P 160415-47-4P 160415-44-1P 160415-45-2P 160415-46-3P 160415-47-4P 160415-48-5P 160415-49-6P 160415-50-9P 160415-51-0P 160415-52-1P 160415-53-2P 160415-54-3P 160415-55-4P 160415-56-5P 160415-56-5P 160415-57-6P 160415-59-8P 160415-57-6P 160415-58-7P 160415-60-1P 160415-61-2P 160415-62-3P 160415-63-4P 160415-64-5P 160497-02-9P 160497-03-0P 180863-29-0P 180863-32-5P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 2-(thio)morpholineacetates and analogs as GABAB antagonists) ΙT 160415-06-5P 160415-09-8P 160415-10-1P 160415-40-7P 160415-41-8P 160497-02-9P 160497-03-0P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of 2-(thio)morpholineacetates and analogs as GABAB antagonists) RN 160415-06-5 HCAPLUS CN 2-Morpholineacetic acid, 5,5-dimethyl-4-[(phenylmethoxy)carbonyl]- (9CI)

(CA INDEX NAME)

RN 160415-09-8 HCAPLUS

CN 2-Morpholineacetic acid, 4-[(1,1-dimethylethoxy)carbonyl]-5,5-dimethyl-,
ethyl ester, (+)- (9CI) (CA INDEX NAME)

Rotation (+).

RN 160415-10-1 HCAPLUS

CN 2-Morpholineacetic acid, 4-[(1,1-dimethylethoxy)carbonyl]-5,5-dimethyl-, ethyl ester, (-)- (9CI) (CA INDEX NAME)

Rotation (-).

RN 160415-40-7 HCAPLUS

CN 2-Morpholineacetic acid, 5,5-dimethyl-4-[(phenylmethoxy)carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 160415-41-8 HCAPLUS

CN 2-Morpholineacetic acid, 4-[(1,1-dimethylethoxy)carbonyl]-5,5-dimethyl-, ethyl ester (9CI) (CA INDEX NAME)

RN 160497-02-9 HCAPLUS

CN 2-Morpholineacetic acid, 5,5-dimethyl-4-[(phenylmethoxy)carbonyl]-, ethyl ester, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 160497-03-0 HCAPLUS

2-Morpholineacetic acid, 5,5-dimethyl-4-[(phenylmethoxy)carbonyl]-, ethyl CN ester, (S) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN L28

1992:511587 HCAPLUS AN

DN 117:111587

ΤI Preparation of 4-[(tetrazolylbiphenylyl)methoxy]naphthyridines and analogs as angiotensin II antagonists

Roberts, David Anthony; Pearce, Robert James; Bradbury, Robert Hugh IN

PA Imperial Chemical Industries PLC, UK

Eur. Pat. Appl., 33 pp. so

CODEN: EPXXDW

DTPatent

English LΑ

FAN.CNT 1						
PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
PI EP487252	A1 19920527	1991EP-0310500	19911114 <			
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU, NL,	SE			
CA2054555	AA 19920520	1991CA-2054555	19911030 <			
US5219863	A 19930615	1991US-0791717	19911114 <			
JP04273859	A2 19920930	1991JP-0303387	19911119 <			
PRAI 1990GB-0025123	A 19901119	<				
OS MARPAT 117:111587						
GT						

AB Title compds. [I; R1 = H, (cyclo)alkyl, Ph, phenylalkyl, etc.; R2 = H,

II

```
alkyl; R3 = PhO, pyridyloxy, YAB; A = alk(en)ylene, 1,3-
     cyclopentylenediyl, 1,4-cyclohexylenediyl, etc.; B = OH, alkoxy, Ph, PhO,
     (di)(alkyl)amino, etc.; R4 = H, alkyl, (fluoro)alkoxy, halo, CF3, etc.; R5
     = H, alkyl, alkoxy, halo, CF3, cyano, NO2; X = bond,
     (substituted) phenylenediyl; X1 = CH, N; Y = O, S; Z = 1H-tetrazol-5-
    yl(carbamoyl), CO2H, (alkylsulfonyl)carbamoyl, etc.] were prepared Thus,
     5-amino-2-[2-(tert-butyldiphenylsilyloxy)ethoxy]pyridine (preparation given)
    was cyclocondensed with EtCOCH2CO2Me and the naphthyridone product
     condensed with 5-(4'-bromomethylbiphenyl-2-yl)-2-triphenylmethyl-2H-
     tetrazole to give, after deprotection, title compound II (R = H, X =
     1,4-phenylenediyl, Z = 2-triphenylmethyl-2H-tetrazol-5-yl) which was
     condensed with EtNCO to give, after deprotection, II (R = CONHEt, X =
     1,4-phenylenediyl, Z = 1H - tetrazol-5-yl). The latter had ED50 of 0.08
    mg/kg i.v. against angiotensin II-induced pressor response in rats.
IC
    ICM C07D-0471/04
     ICS C07D-0215/233; C07D-0401/12; A61K-0031/47; A61K-0031/435
CC
    28-2 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1
IT
    Antihypertensives
        ([(tetrazolylbiphenylyl)methoxy]naphthyridines and analogs)
IT
     99073-54-8P
                  99185-50-9P 101351-09-1P 135900-24-2P 135900-26-4P
     143071-40-3P
                    143071-41-4P
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                                   143071-49-2P
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     143083-41-4P
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     (Reactant or reagent)
        (preparation and reaction of, in preparation of angiotensin II antagonists)
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                  143071-30-1P
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     143071-84-5P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of, as angiotensin II antagonist)
IT
    143071-55-0P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, in preparation of angiotensin II antagonists)
RN
     143071-55-0 HCAPLUS
CN
     4-Morpholinecarboxylic acid, 2-[[6-ethyl-8-[[2'-[2-(triphenylmethyl)-2H-
     tetrazol-5-yl][1,1'-biphenyl]-4-yl]methoxy]-1,5-naphthyridin-2-
    yl]oxy]ethyl ester (9CI) (CA INDEX NAME)
```

IT 143071-32-3P 143071-54-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as angiotensin II antagonist)

RN 143071-32-3 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[6-ethyl-8-[[2'-(1H-tetrazol-5-yl)][1,1'-biphenyl]-4-yl]methoxy]-1,5-naphthyridin-2-yl]oxy]ethyl ester (9CI) (CA INDEX NAME)

RN 143071-54-9 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[6-ethyl-8-[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methoxy]-1,5-naphthyridin-2-yl]oxy]ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

HCl

L28 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1991:101750 HCAPLUS

DN 114:101750

TI Preparation of 1,4-dihydropyridines as cardiovascular agents

IN Suzuki, Kunio; Murase, Satoshi; Ushijima, Ryosuke; Nakagawa, Susumu

PA Banyu Pharmaceutical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 30 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN. CNT 1

rau.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP02225467	A2	19900907	1989JP-0048035	19890228 <
PRAI	1989JP-0048035		19890228	<	
os	MARPAT 114:101750				

GΙ

AB The title compds. I (R1, R2 = alkyl, alkoxy; R3 = alkyl; NQ = pyrrolidin-1-yl, piperidino, morpholino, etc.; A = alkylene) were prepared A mixture of 3-amino-4-[(4-methylpiperazinyl)carbonyloxy]crotonic acid Et ester, 3-nitrobenzaldehyde, and Et acetoacetate in EtOH ws stirred at 60-70° for 16 h to give 43.7% I (NO2 at position 3, R1 = R2 = Et, R3 = Me, A = CH2, NQ = 4-methylpiperazin-1-yl) (II). In the coronary vasodilating test using rabbit hearts, II exhibited pI50 value of 7.67, vs., pI50 of 6.85 for nifedipine.

IC ICM C07D-0211/90

ICS A61K-0031/445; A61K-0031/495; C07D-0295/20; C07D-0405/12

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ICA C07D-0307/52
     27-16 (Heterocyclic Compounds (One Hetero Atom))
CC
     Section cross-reference(s): 1
IT
    Antihypertensives
       Cardiovascular agents
       Vasodilators
        ((nitrophenyl)dihydropyridinedicarboxylates)
IT
     90511-97-0P 90511-98-1P 90511-99-2P 132220-71-4P
     132220-72-5P
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     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, in preparation of cardiovascular agent)
                  123494-25-7P 123494-26-8P 123494-27-9P
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     132220-68-9P
                  132220-69-0P
                                  132220-70-3P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of, as cardiovascular agent)
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    92-54-6, N-Phenylpiperazine 99-61-6, 3-Nitrobenzaldehyde
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    N-Methylpiperazine 110-89-4, Piperidine, reactions
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    Morpholine, reactions
                           123-75-1, Pyrrolidine, reactions
                                                               141-97-9, Ethyl
    acetoacetate 2759-28-6, N-Benzylpiperazine 5610-49-1,
    N-Butylpiperazine 13889-98-0, N-Acetylpiperazine 17738-04-4
    39562-16-8 40172-95-0, N-(2-Furoyl)piperazine 55486-27-6
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     90512-11-1
    RL: RCT (Reactant); RACT (Reactant or reagent)
        (reaction of, in preparation of cardiovascular agent)
TΤ
     90511-99-2P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
     (Reactant or reagent)
        (preparation and reaction of, in preparation of cardiovascular agent)
RN
     90511-99-2 HCAPLUS
CN
     4-Morpholinecarboxylic acid, 2-amino-4-ethoxy-4-oxo-2-butenyl ester (9CI)
     (CA INDEX NAME)
```

$$\begin{array}{c|c}
\text{Me} & H & O & O \\
\text{Me} & CH_2 - O - C - N & C \\
\text{COEt} & O & O \\
\text{NO}_2 & O & O \\
\end{array}$$

IT 90511-55-0

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction of, in preparation of cardiovascular agent)

RN 90511-55-0 HCAPLUS

CN 4-Morpholinecarboxylic acid, 4-ethoxy-4-oxo-2-butynyl ester (9CI) (CA INDEX NAME)

L28 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1990:669 HCAPLUS

DN 112:669

TI Amino acid derivatives, processes for their preparation, and pharmaceutical compositions comprising them for treatment of hypertension and heart failure

IN Hemmi, Keiji; Neya, Masahiro; Marusawa, Hiroshi; Imai, Keisuke; Kayakiri, Natsuko; Hashimoto, Masashi

PA Fujisawa Pharmaceutical Co., Ltd., Japan

SO Eur. Pat. Appl., 60 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

1711	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP300189	A2	19890125	1988EP-0109430	19880614 <
	EP300189	AЗ	19900822		
	EP300189	B1	19941102		
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	ZA8804087	A	19890222	1988ZA-0004087	19880608 <
	US4921855	A	19900501	1988US-0204549	19880609 <
	ES2067456	T 3	19950401	1988ES-0109430	19880614 <
	FI8802875	A	19881223	1988FI-0002875	19880616 <
	FI96202	В	19960215		
	FI96202	C	19960527		
	IL86782	A1	19930404	1988IL-0086782	19880616 <
	AU8818190	A1	19881222	1988AU-0018190	19880621 <
	AU617674	B2	19911205		
	DK8803400	A	19881223	1988DK-0003400	19880621 <
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	NO175371	В	19940627		
	NO175371	C	19941005		
	CN1030411	A	19890118	1988CN-0103878	19880621 <

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     1990US-0462117
                         A3
GΤ
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* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

A process for preparing I [R1 = lower alkyl optionally substituted with acyl, AB hydroxy, lower alkoxy, aryl, lower alkylthio, NR5R6; R5 = H, acyl; R6 = H, lower alkyl, aryl, (lower alkyl- or acyl-substituted) amino; R2, R3 = H, lower alkyl; R4 = lower alkyl; R1NR2 = heterocycle optionally substituted with lower alkyl, hydroxy(lower)alkyl, lower alkoxy(lower)alkyl, acyl(lower)alkyl, oxo, acyl] or its pharmaceutically acceptable salt comprises (a) reacting II (R3, R4 as above; R8 = H, N-protective group) or its reactive derivative at the amino group or a salt thereof with III (R1, R2 as above) or its reactive derivative at the COO group or a salt thereof, and, if necessary, eliminating the N-protective group or (b) subjecting IV (R2, R3, R4, R6 as above; R7 = N-protective group; A = lower alkylene) or its salt to elimination reaction of R7 to give V (R2, R3, R4, R6, A as above) or its salt. I are useful as antihypertensives or for the treatment of heart failure. A solution of 2(S)-[N-(2-morpholinocarbonylethyl)-Nmethylaminocarbonyloxy]-3-phenylpropionic acid (preparation described) 449 and 2(S)-(Nα-methyl-Nim-tosyl-L-histidyl)amino-1-cyclohexyl-3(S)-hydroxy-6-methylheptane (preparation described) 300 mg in CH2Cl2 (30 mL) was mixed with N-ethyl-N'-(3-dimethylaminopropyl)carbodiimide-HCl 140 mg at 5° overnight. The residue was dissolved in EtOAC, washed with HCl/NaHCO3, dried, redissolved in DMF, and reacted with pyridine-HCl 650 mg for 2 h at room temperature Workup and purification by TLC yielded $2(S) - [N\alpha - [2(S) - [N-(2-N\alpha - [N\alpha - [N\alpha$ morpholinocarbonylethyl) -N-methylaminocarbonyloxy] -3-phenylpropionyl] -Nα-methyl-L-histidyl]amino-1-cyclohexyl-3(S)-hydroxy-6-methylheptane (VI) 221 mg (m.p. 80-87°) as an amorphous powder. VI, dissolved in HCl and orally administered to Na-depleted male or female cynomolgus monkeys (32 mg/kg), reduced mean arterial blood pressure and plasma renin activity by 18 and 92%, resp.

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IC ICM C07D-0233/64
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ICS A61K-0031/415

CC 1-8 (Pharmacology)

Section cross-reference(s): 25, 28, 34

IT Antihypertensives

(amino acid derivs.)

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                                                                 124075-84-9P
     124075-85-0P
                    124075-86-1P
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                    124076-01-3P
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                                   124076-02-4P
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                    124076-06-8P
                                   124076-07-9P
                                                  124076-08-0P
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     124076-10-4P
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     124076-15-9P
                  124076-16-0P
                                   124076-17-1P
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                                                                 124076-19-3P
     124076-20-6P 124076-21-7P 124076-22-8P 124076-23-9P
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     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
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        (preparation of, as antihypertensive)
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    study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
    use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of, as antihypertensive, renin inhibition in relation to)
IT
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     124074-83-5P
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     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, in preparation of antihypertensives)
IT
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                                                   124122-52-7P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of, in preparation of antihypertensives)
IT
     124072-32-8P 124072-33-9P 124076-21-7P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation of, as antihypertensive)
RN
     124072-32-8 HCAPLUS
CN
     4-Morpholinecarboxylic acid, 2-[[2-[[1-(cyclohexylmethyl)-2-hydroxy-5-
     methylhexyl]amino]-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]amino]-2-oxo-1-
     (phenylmethyl)ethyl ester, [1S-[1R*[R*(R*)],2R*]]- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

RN 124072-33-9 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[2-[[1-(cyclohexylmethyl)-2-hydroxy-5-methylhexyl]amino]-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]methylamino]-2-oxo-1-(phenylmethyl)ethyl ester, [1S-[1R*[R*(R*)],2R*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 124076-21-7 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[(dimethylamino)carbonyl]-2-methyl-, 2-[[2-[[1-(cyclohexylmethyl)-2-hydroxy-5-methylhexyl]amino]-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]methylamino]-2-oxo-1-(phenylmethyl)ethyl ester, [2R-[2\alpha, 3\alpha, 4[S*[S*(1S*, 2S*)]]]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 124072-32-8P 124072-33-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of, as antihypertensive, renin inhibition in relation to) 124072-32-8 HCAPLUS

4-Morpholinecarboxylic acid, 2-[[2-[[1-(cyclohexylmethyl)-2-hydroxy-5-methylhexyl]amino]-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]amino]-2-oxo-1-(phenylmethyl)ethyl ester, [1S-[1R*[R*(R*)],2R*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

CN

RN 124072-33-9 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-[[2-[[1-(cyclohexylmethyl)-2-hydroxy-5-methylhexyl]amino]-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]methylamino]-2-oxo-1-(phenylmethyl)ethyl ester, [1S-[1R*[R*(R*)],2R*]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 114343-31-6P 124073-34-3P 124074-26-6P 124075-29-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, in preparation of antihypertensives)

RN 114343-31-6 HCAPLUS

CN 4-Morpholinecarboxylic acid, (1S)-1-carboxy-2-phenylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 124073-34-3 HCAPLUS

CN 4-Morpholinecarboxylic acid, 2-oxo-2-(phenylmethoxy)-1-(phenylmethyl)ethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 124074-26-6 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[(dimethylamino)carbonyl]-2-methyl-, 2-oxo-2-(phenylmethoxy)-1-(phenylmethyl)ethyl ester, [2R- $[2\alpha, 3\alpha, 4(S^*)]$]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 124075-29-2 HCAPLUS

CN 4-Morpholinecarboxylic acid, 3-[(dimethylamino)carbonyl]-2-methyl-, 1-carboxy-2-phenylethyl ester, [2R-[2 α ,3 α ,4(S*)]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1989:208538 HCAPLUS

DN 110:208538

TI Polarographic screening test for the radiosensitizing effect of imidazole and triazole drugs on tumor cells

AU Takamura, Kiyoko; Kusu, Fumiyo; Murayama, Chieko; Suzuki, Akira; Mori, Tomoyuki; Miyata, Yoshiyuki; Suzuki, Toshimitsu; Sakaguchi, Masakazu

CS Tokyo Coll. Pharm., Hachioji, 192-03, Japan

SO Denki Kagaku oyobi Kogyo Butsuri Kagaku (1988), 56(12), 1072-6 CODEN: DKOKAZ; ISSN: 0366-9297

DT Journal

LA Japanese

AB The radiosensitizing effects to γ -rays of 25 nitroimidazoles (2- and 4-nitroimidazoles and including misonidazole) and 19 nitrotriazoles were studied in Chinese hamster V79 cells and mouse EMT 6 hypoxic tumor cells in relation to their polarog. half-wave potentials. All drugs gave a well-defined reduction wave on d.c. polarograms, and the wave was ascribed to a reduction of their vitro groups to form their corresponding hydroxylamines by reference to TLC Rf values and UV absorption spectra. The half-wave potentials of the drugs correlated with the drug concentration producing radiosensitivity enhancement ratios of 1.6.

CC 8-6 (Radiation Biochemistry)
Section cross-reference(s): 14

IT Neoplasm inhibitors

(nitroimidazoles with γ -rays, polarog. screening test for study of)

TТ 5006-67-7, SS 91-1 5006-69-9, SS 166-1 13551-87-6, Misonidazole 22668-01-5, SR2508 82205-95-6, RA263 93679-08-4, RK 27 93679-10-8, 93679-12-0, RK29 105958-72-3, SS 80-2 117259-20-8, KIH 801 117278-72-5, KIH 851 117466-84-9, RP 26 120398-89-2, RP 170 120398-90-5, SS 149-1 120398-91-6, SS 131-1 120398-92-7, SS 154-1 120398-95-0, SS 339 120398-93-8, SS 155-1 120398-94-9, SS 338 120398-96-1, SS 183-1 120398-97-2, SS 184-1 120398-98-3, SS 185-1 120398-99-4, SS 186-1 120399-00-0, KIH 850 120399-01-1, KIH 853 120399-02-2, RP 189 120399-03-3, SS 323 120399-04-4, SS 132-1

120399-07-7, SS 142 120399-05-5, SS 133-1 120399-06-6, SS 138 120399-08-8, SS 134-1 120399-09-9, SS 135-1 120399-10-2, SS 139 120399-11-3, SS 140 120399-12-4, SS 306 120399-13-5, SS 308 120399-14-6, SS 312 120399-15-7, SS 315 120399-16-8, SS 325 120399-17-9, KIH 802 120443-92-7, RP 27a 120399-18-0, KIH 852 120443-93-8, RP 27b RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (radiosensitization by, of tumor cells to γ -rays, polarog. screening test for study of) IT 120399-12-4, SS 306 120399-14-6, SS 312 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (radiosensitization by, of tumor cells to γ -rays, polarog. screening test for study of) RN 120399-12-4 HCAPLUS CN 4-Morpholinecarboxylic acid, 2-(3-nitro-1H-1,2,4-triazol-1-yl)ethyl ester (9CI) (CA INDEX NAME)

$$O_2N$$
 N
 CH_2-CH_2-O-C
 N
 CH_2-CH_2-O-C

RN120399-14-6 HCAPLUS 4-Morpholinecarboxylic acid, 2-(5-nitro-1H-1,2,4-triazol-1-yl)ethyl ester CN (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
N & CH_2 - CH$$

L28 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN 1986:533909 HCAPLUS ANDN 105:133909 (Thio) morphlinecarboxylates as antihyertensives ΤI Gante, Joachim; Weber, Wolf Dietrich; Sombroek, Johannes; Schmitges, IN Claus; Minck, Klaus Otto PΑ Merck Patent G.m.b.H., Fed. Rep. Ger. Ger. Offen., 35 pp. SO CODEN: GWXXBX DTPatent LA German FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE3436386	A1	19860410	1984DE-3436386	19841004 <
	EP176903	A1	19860409	1985EP-0111997	19850921 <
	R: AT, BE, CH,	DE, FR	, GB, IT, LI	, NL, SE	
	AU8548278	A1	19860410	1985AU-0048278	19851002 <
	HU42764	A2	19870828	1985HU-0003844	19851003 <
	HU195838	В	19880728		
	JP61091180	A2	19860509	1985JP-0220508	19851004 <
	ZA8507683	Α	19860528	1985ZA-0007683	19851004 <
	ES547616	A1	19870301	1985ES-0547616	19851004 <
PRAI	1984DE-3436386	A	19841004 <		
os	CASREACT 105:133909:	MARPAT	r 105:133909		

CASREACT 105:133909; MARPAT 105:133909

GΙ

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The title compds. I [X = O, S, SO, SO2; R1, R5 = H, C1-4 alkyl, PhCH2; R2]
AB
     = H, C1-6 alkyl; R3 = Me, (CH2)4NH2; R4 = Me, (CH2)2R6; R6 = (un)substituted Ph] and their salts, being useful in lowering blood
     pressure (no data), are prepared Thus, (S)-thiomorpholine-3-carboxylic acid
     Et ester was reacted with N-(1S-ethoxycarbonyl-3-phenylpropyl)-L-alanine
     to give (S,S,S)-I (X = S, R1 = R5 = Et, R2 = H, R3 = Me, R4 =
     3-phenylpropyl) (II). A capsule was formulated containing II 5, lactose 20,
     starch 6, talc 1, and Mg stearate 0.5 mg.
IC
     ICM C07D-0279/12
     ICS C07D-0265/30; A61K-0031/535; A61K-0031/54
     28-18 (Heterocyclic Compounds (More Than One Hetero Atom))
     Section cross-reference(s): 1, 63
TТ
     Antihypertensives
        ((thio)morpholinecarboxylates)
IT
     104277-59-0 105693-13-8
     RL: PROC (Process)
        (Schiff base formation of, with oxophenylbutyrate)
TT
     104254-32-2
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (hydrogenolysis of)
IT
                    104254-17-3P 104254-18-4P
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     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
         (preparation of, as antihypertensive)
IT
     105693-13-8
     RL: PROC (Process)
         (Schiff base formation of, with oxophenylbutyrate)
RN
     105693-13-8 HCAPLUS
CN
     3-Morpholinecarboxylic acid, 4-(2-amino-1-oxopropyl)-, 1,1-dimethylethyl
     ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)
```

Absolute stereochemistry.

[3S-[3R*,4[R*(R*)]]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Absolute stereochemistry.

RN 104254-22-0 HCAPLUS
CN 3-Morpholinecarboxylic acid, 4-[2-[[1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

RN104321-17-7 HCAPLUS

3-Morpholinecarboxylic acid, 4-[2-[[1-(ethoxycarbonyl)-3-CN phenylpropyl]amino]-1-oxopropyl]-, ethyl ester, [3R-[3R*,4[S*(S*)]]]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN L28

1986:230474 HCAPLUS AN

DN 104:230474

TI Use of a phospholipid derivative

Nojima, Shoshichi; Nomura, Hiroaki; Tsushima, Susumu IN

PA Takeda Chemical Industries, Ltd., Japan

so Eur. Pat. Appl., 19 pp.

CODEN: EPXXDW

DT Patent

LA	English						
FAN.	CNT 1						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
		- -					
PΙ	EP171968	A1	19860219	1985EP-0305407	19850730 <		
	R: AT, BE, CH,	DE, FR	, GB, IT,	LI, LU, NL, SE			
	JP61040218	A2	19860226	1984JP-0163581	19840802 <		
PRAI	1984JP-0163581	Α	19840802	<			
os	CASREACT 104:230474	; MARPA	T 104:2304	174			
GI For diagram(s), see printed CA Issue.							
AB Phospholipd derivs., I where R1 = C14-19 alkyl, R2, R3, and R4 =							
independently C1-2 alkyl or +NR2R3R4 = N-containing 5- or 6-membered							
heterocyclic ring, and NR5R6 = 4-6-membered ring, or pharmaceutically							
acceptable salts inhibit tumor proliferation. The synthesis, formulation,							
	and biol. activity of I were reported. E.g., 3-octadecyl-2-						
			-	eted with bromoethyl			
				sted with bromoethyr			

phosphodichloridate and the residue dissolved in N-methylpyrrolidine to

afford 3-octadecyloxy-2-(pyrrolidinocarbonyloxy)propyl

```
2-(N-methylpyrrolidinio)ethyl phosphate. Tablets (1000) were prepared from
     a granulation containing 1-O-octadecyl-2-O-(morpholinocarbonyl)glycero-3-
     phosphocholine (II) 10, lactose 85, corn starch 20, hydroxypropyl
     cellulose 4, and Mg stearate 1 g. II inhibited leukemia HL-60 cells.
     ICM A61K-0031/685
IC
ICA C07F-0009/65
CC
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 1, 27
    Neoplasm inhibitors
IT
        (phospholipid derivs.)
     89078-80-8 102637-72-9 102637-73-0
IT
     RL: BIOL (Biological study)
        (in pharmaceutical composition, as neoplasm inhibitor)
TT
     70641-51-9
                89078-68-2 89078-82-0
    RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (neoplasm inhibitor)
IT
     89078-80-8 102637-73-0
     RL: BIOL (Biological study)
        (in pharmaceutical composition, as neoplasm inhibitor)
RN
     89078-80-8 HCAPLUS
CN
     3,5,9-Trioxa-4-phosphaheptacosan-1-aminium, 4-hydroxy-N,N,N-trimethyl-7-
     [(4-morpholinylcarbonyl)oxy]-, inner salt, 4-oxide (9CI) (CA INDEX NAME)
```

RN 102637-73-0 HCAPLUS
CN Pyrrolidinium, 1-[4-hydroxy-7-[(4-morpholinylcarbonyl)oxy]-4-oxido-3,5,9trioxa-4-phosphaheptacos-1-yl]-1-methyl-, inner salt (9CI) (CA INDEX
NAME)

PAGE 1-A

PAGE 2-A

\(\int_{\text{N}}\)

- IT 89078-82-0
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (neoplasm inhibitor)
- RN 89078-82-0 HCAPLUS
- CN Thiazolium, 3-[4-hydroxy-7-[(4-morpholinylcarbonyl)oxy]-4-oxido-3,5,9-trioxa-4-phosphaheptacos-1-yl]-, inner salt (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A



L28 ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN AN 1984:448270 HCAPLUS

DN 101:48270

TI Selective delivery of cytotoxic compounds to cells by the LDL pathway

Firestone, Raymond A.; Pisano, Judith M.; Falck, J. R.; McPhaul, Michael ΑU M.; Krieger, Monty

CS Membrane Athritis Res. Dep., Merck Sharp and Dohme Res. Lab., Rahway, NJ, 07065, USA

Journal of Medicinal Chemistry (1984), 27(8), 1037-43 so

CODEN: JMCMAR; ISSN: 0022-2623

DTJournal

LΑ English

GI

AB Cytotoxic compds. were prepared for reconstitution with LDL (low-d. lipoproteins) to be delivered to cancer cells that internalize LDL, and evaluated by measuring the toxicity of reconstituted LDL toward test cells, SV-589 (SV-40 transformed human fibroblasts) bearing LDL receptors. Selectivity was determined by comparison, either with mutant cells with few LDL receptors, or with reconstituted methylated LDL (not recognized by LDL receptors) or normal cells. N-[[[4- $(3\beta$ -(Oleoyloxy)androst-5-en- $17\beta-y1$]pentyl]oxy]carbonyl]-N, N-bis(2-chloroethyl)amine (I) [90343-98-9] reconstituted well and was delivered exclusively via the LDL pathway in amts. capable of killing 100% cells. CC

1-6 (Pharmacology)

Section cross-reference(s): 28, 32

TT Neoplasm inhibitors

(lysosomotropic detergents as, delivery by low-d. lipoprotein in relation to)

IT 90343-82-1P 5299-52-5P 64833-92-7P 90343-84-3P 90343-85-4P 90343-86-5P 90343-87-6P 90343-88-7P 90343-89-8P 90343-90-1P 90343-91-2P 90343-92-3P 90343-93-4P 90343-94-5P 90343-96-7P 90343-97-8P 90343-95-6P 90343-98-9P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and neoplasm inhibiting activity of, selective delivery by

low-d. lipoprotein in relation to)

тт 90343-92-3P

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and neoplasm inhibiting activity of, selective delivery by low-d. lipoprotein in relation to)

RN 90343-92-3 HCAPLUS

CN Pregn-5-ene-5,21-diol, 20-methyl-, 21-(2-dodecyl-4-morpholinecarboxylate) 3-(9Z)-9-octadecenoate, (3β,20S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

PAGE 1-B

GI

L28 ANSWER 41 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN 1979:457266 HCAPLUS AN DN 91:57266 TI Ergoline sulfides and sulfoxides SIMES Societa Italiana Medicinali e Sintetici S.p.A., Italy PΑ Belg., 16 pp. CODEN: BEXXAL so DT Patent LA French FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE ---------------------_____ 19780705 <--BE----868768 ΡI A1 19781103 1978BE-0189095 US---4197299 19800408 1978US-0917335 19780620 <--Α JP--54014999 A2 19790203 1978JP-0078793 19780629 <--JP--62025149 19870601 B4 GB---2000772 19790117 1978GB-0028932 19780705 <--Α GB---2000772 **B2** 19820224 19780705 <--FR---2396758 19790202 1978FR-0020054 **A1** FR---2396758 B1 19810626 19780705 <--1978DE-2829471 DE---2829471 A1 19790215 DE---2829471 C2 19880922 PRAI 1977CH-0008255 Α 19770705 <--MARPAT 91:57266 os

Ergolines I [xy = CH2CH, CH:C; R = CH2OH, CH2O3SC6H4Me, CH2O3SC6H4Me-4, CH2O2CNR3R4 (R3, R4 = C1-4 alkyl; R3R4N = piperidino, morpholino, piperazino), Q (R5, R6 = H, Me; R7 = PhCH2, CH2CHMe2, CHMe2); R1 = H, 1-4 alkyl; R2 = SR8, SOR8; (R8 = C1-6 alkyl, Ph)] (25 compds.), possessing antidepressant, adrenolytics, spasmolytic, vasodilator, psychotropic, muscle relaxant, sympatholytic activities, were prepared Thus, to 3 g Me dihydrolysergate in CHCl3 cooled to -60° was added 1.32 g MeSCl to give 1.9 g I (XY = CH2CH, R = CO2Me, R1 = H, R2 = SMe). IC C07D; A61K 31-6 (Alkaloids) CC ΙT Muscle relaxants and Spasmolytics Psychotropics Sympatholytics Vasodilators (ergolines as) 69754-17-2P 69754-19-4P 69754-21-8P 69754-23-0P IT 69754-15-0P 69754-24-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and antidepressant activity of) 69754-05-8P 69754-07-0P 69754-09-2P TT 69754-03-6P 69754-11-6P 69754-13-8P 69754-25-2P 69754-26-3P 69765-32-8P 69754-28-5P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of) IT 69754-24-1P RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation and antidepressant activity of) RN 69754-24-1 HCAPLUS Ergoline-8-methanol, 1,6-dimethyl-2-(methylthio)-, 4-morpholinecarboxylate CN

Absolute stereochemistry.

(ester), (8β) - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 69754-26-3 HCAPLUS CN Ergoline-8-methanol, 6-methyl-2-(methylsulfinyl)-, 4-morpholinecarboxylate (ester), (8 β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L28 ANSWER 42 OF 42 HCAPLUS COPYRIGHT 2006 ACS on STN

1977:72966 HCAPLUS AN

86:72966 DN

TI Carbamates of 2-haloergolines and 2-haloergolenes

PA

SIPHAR S. A., Switz. Ger. Offen., 24 pp. so

CODEN: GWXXBX

DTPatent

LΑ German

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE2610864	Al	19760930	1976DE-2610864	19760315 <
	CH619709	A	19801015	1975CH-0003273	19750314 <
	BE839521	A1	19760701	1976BE-0165126	19760312 <
	DK7601095	A	19760915	1976DK-0001095	19760312 <
	SE7603231	A	19760915	1976SE-0003231	19760312 <
	FR2303548	A1	19761008	1976FR-0007221	19760312 <
	FR2303548	B1	1978111 7		
	CA1076107	A1	19800422	1976CA-0247788	19760312 <
	JP51146498	A2	19761216	1976JP-0028012	19760315 <
PRAI GI	1975CH-0003273	A	19750314	<	

$$\begin{array}{c} \text{CH}_2\text{O}_2\text{CNR}^2\text{R}^3 \\ \\ \text{NMe} \\ \\ \text{RN} \\ \end{array}$$

Haloergolines I and II [R = H, R1 = Br, Cl, I, R2 = R3 = Me, Et, R2R3 =

noble jarrell 24/08/2006

```
(CH2)n, n = 3,4,5,6, NR2R3 = morpholino, 4-methylpiperazino,
     3-azabicyclo[3.2.2]nonan-3-yl; R = Me, R1 = Br, NR2R3 =
     hexahydroazepin-1-yl, morpholino] (19 compds.) and their salts, possessing
     pharmacol. activities, were prepared by halogenation of I and II (R1 = H) in
     aprotic solvents using MeCONHBr, N-bromosuccinimide, N-iodosuccinimide,
     and N-chlorobenzotriazole. Thus, the treatment of II (R = R1 = H, R2 = R3
     = Me) in dioxane under N with N-bromosuccinimide gave II (R1 = Br). I [R
     = H, R1 = Br, R2R3 = (CH2)6] had a sympatholytic ED50 of 8\mu g/kg i.v. in
IC
    C07D-0457/00
    31-6 (Alkaloids)
CC
TT
    Antihypertensives
      Muscle relaxants and Spasmolytics
     Sympatholytics
        (bromoergolines as)
ΙT
     55855-95-3
                 55855-96-4
                               55856-01-4
                                            55856-02-5
                                                         55856-17-2
                               55856-23-0 55856-25-2 55856-26-3
     55856-18-3
                  55856-21-8
     55906-86-0
                  55976-62-0
                               56009-92-8
                                            61771-44-6
                                                         61771-45-7
                  61771-47-9
     61771-46-8
                               61771-48-0
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (bromination of)
IT
     60019-20-7P
                  61771-22-0P
                                 61771-25-3P
                                               61771-26-4P
                                                             61771-30-0P
     61771-34-4P 61771-42-4P 61771-43-5P 61823-84-5P
    RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic
     use); BIOL (Biological study); PREP (Preparation); USES (Uses)
        (preparation and sympatholytic activity of)
IT
     61771-14-0P
                  61771-15-1P
                                 61771-21-9P
                                               61771-24-2P
                                                             61771-28-6P
     61771-32-2P
                   61771-36-6P
                                 61771-38-8P
                                               61771-39-9P 61771-41-3P
     61824-23-5P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (preparation of)
IT
     55856-25-2 61771-46-8
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (bromination of)
     55856-25-2 HCAPLUS
RN
CN
    Ergoline-8-methanol, 6-methyl-, 4-morpholinecarboxylate (ester),
     (8\beta) - (9CI)
                 (CA INDEX NAME)
```

Absolute stereochemistry.

Absolute stereochemistry.

Absolute stereochemistry.

CMF C21 H26 Br N3 O3

Absolute stereochemistry.

CM 2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

=> d his

L3

(FILE 'HOME' ENTERED AT 12:52:11 ON 24 AUG 2006)

FILE 'REGISTRY' ENTERED AT 12:52:29 ON 24 AUG 2006 ACT SAC581F0/A

L1 STR

403638) SEA FILE=REGISTRY ABB=ON PLU=ON NC2OC2/ES L_2

2805 SEA FILE=REGISTRY SUB=L2 SSS FUL L1

FILE 'HCAPLUS' ENTERED AT 12:53:28 ON 24 AUG 2006

L4 954 L3

1 (US2005004118 OR US2003060465)/PN OR (US2004-767581 OR US2002-0 L5

E JILANI J/AU E JILANI J/AU

12 E3-7 L6

12 (SPEC?(W) PHARMACEUTIC?)/CS,PA L7

FILE 'REGISTRY' ENTERED AT 12:57:11 ON 24 AUG 2006

FILE 'HCAPLUS' ENTERED AT 12:57:14 ON 24 AUG 2006

L8 TRA L5 1- RN : 55 TERMS

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FILE 'REGISTRY' ENTERED AT 12:57:14 ON 24 AUG 2006
L9
              55 SEA L8
               8 L9 AND L3
L10
     FILE 'HCAPLUS' ENTERED AT 12:57:34 ON 24 AUG 2006
L11
               1 L4 AND L5-7
                 E NSAID/CT
                 E E3+ALL
L12
          10822 ANTI-INFLAMMATORY AGENTS+OLD, NT/CT (L) NONSTEROID?
                 E ANTIBIOTICS/CT
L13
         197353 E3+OLD, NT
                 E E3+ALL
                 E E171
                 E E3+ALL
L14
         262932 E3+OLD, NT
                 E CHEMOTHERAPY/CT
                 E E3+ALL
          33605 E3+OLD, NT
L15
                 E CYTOTOXIC AGENTS/CT
                 E E3+ALL
L16
          12996 E2+OLD
                 E E16+ALL
L17
          16563 E3+OLD
                 E CARDIOVASCULAR/CT
                 E E5+ALL
         119191 E3+NT
L18
                 E MUSCLE RELAX/CT
                 E E4+ALL
           9164 E4+OLD, NT
L19
                 E E10+ALL
L20
            8513 E4+OLD, NT
                 E DIURETIC/CT
                 E E3+ALL
                 E E2+ALL
L21
           9731 E4
                E ANTIEP/CT
                E E5+ALL
                E E2+ALL
          72881 E9+OLD, NT OR E33+OLD, NT OR E34+OLD, NT OR E35+OLD, NT
L22
L23
            228 L4 AND L12-22
L24
              1 L23 AND L5-7
L25
            227 L23 NOT L24
L26
            133 L25 AND (PY<=2000 OR AY<=2000 OR PRY<=2000)
L27
             41 L26 AND L4, L12-22 (L) (PAC OR THU OR DMA)/RL
                E NERVOUS SYSTEM AGENTS/CT
                 E E3+ALL
L28
             42 L24, L27
     FILE 'BIOSIS' ENTERED AT 13:12:56 ON 24 AUG 2006
L29
              1 L3
                E JILANI J/AU
              4 E3-5
L30
L31
              0 L30 AND L29
L32
             10 (SPEC? (W) PHARMACEUTIC?)/CS
L33
              0 L32 AND L29
```

=>